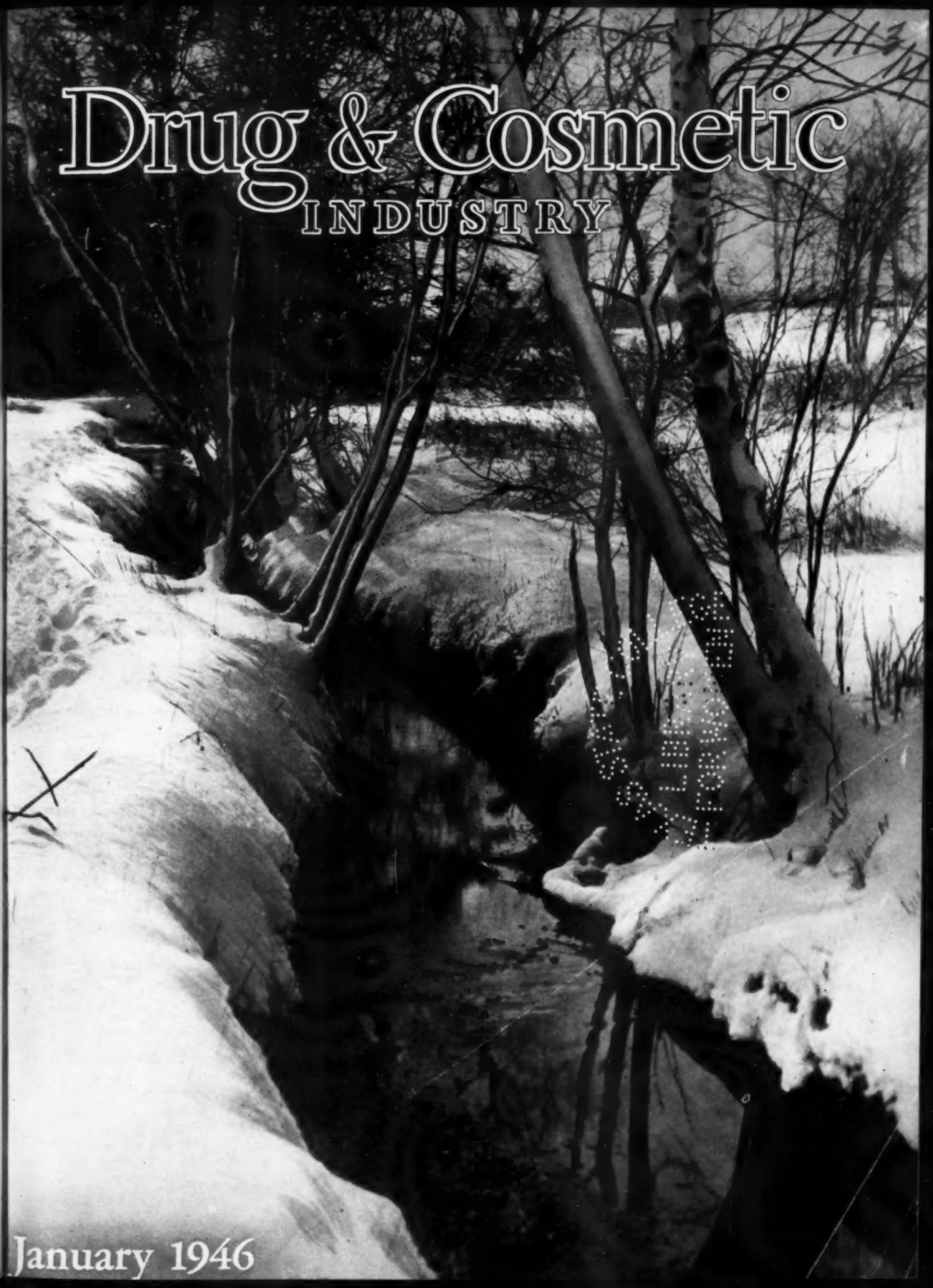
Drug & Cosmetic INDUSTRY



January 1946

What's in a good chewing gum

BESIDES CHICLE

Yes, it's Snow Top Precipitated Calcium Carbonate U.S.P. and for a very important purpose. Chewing gum manufacturers were quick to learn that Snow Top was a perfect ingredient and a dusting medium.

More and more drug and cosmetic makers are joining the ranks of Snow Top Precipitated Calcium Carbonate users because it makes such an excellent base for their products. In the manufacture of face, body and foot powders, for instance, Snow Top is top choice because it bulks high, it has the right opacity, is extremely fine and adheres to the skin. In dentifrices it does the work safely and efficiently.

Snow Top U.S.P. is also used in antacid tablets and other edible food products because its purity meets Pure Food and Drug Act and U.S.P. requirements. Snow Top is available in the following five grades to provide a wide selection to meet your specifications. Write for your sample today.

SPECIFICATION RANGES FOR SNOW TOP

Grades According to Density	Rattle cc.	Flow cc.	2-Hour cc.	Final cc.	g/cc.	Drop Density lbs./ft.
Super Light	30-38	40-48	70-90	55-65	.400-0.300	25.0-18.7
Light	20-30	27-40	45-70	40-55	.550-0.475	34.3-29.6
Medium	17-23	19-27	25-45	24-40	.675-0.550	42.1-34.3
Heavy	15-17	15-19	20-25	19-24	.800-0.675	49.9-42.1
Extra Heavy	11-15	11-15	15-20	15-19	.950-0.800	59.3-49.6

*Measure of the absorption ratio. **Measure of wet bulk. ***Measure of dry bulk packing density.

Snow Top Precipitated Calcium Carbonate ★ Abietic Acid ★ Nuchar Activated Carbons ★ Liquid Caustic Soda ★ Chlorine ★ Indulin (Lignin) ★ Liqro Crude Tall Oil ★ Indusoil Distilled Tall Oil ★ Tall Oil Pitch ★ Sulphate Wood Turpentine

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Drug & Cosmetic INDUSTRY

JANUARY 1946

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THOMAS R. FARRELL, Editor

ELMER SHEETS, Managing Editor

FRANCIS CHILSON, Production Consultant

M. A. LESSER, Technical Editor

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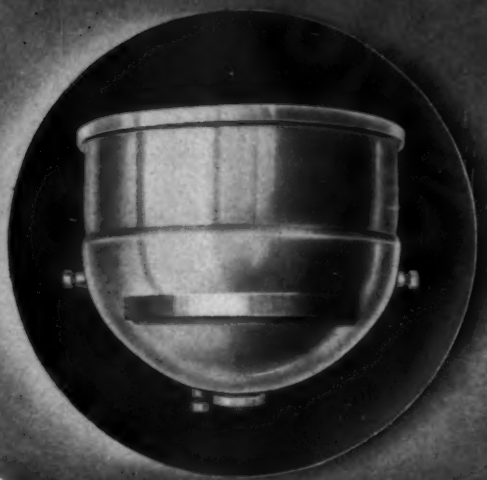

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INSIDE NEWS

JANUARY PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1946

Versatility Makes Tin Cans Best All-Around Containers For Packaging Protection

Because it gives protection to any product, anywhere, under any conditions, the steel-and-tin container—usually referred to as the "tin can"—is recognized by many as the best all-around packaging container. Tin cans have proved their ability to protect food, chemicals, paints and many other products from the destructive elements of air, heat, cold, immersion in water, and rough handling.

Food in Cans Fresher

Canned foods today are more "fresh" than many so-called fresh foods. After fruits or vegetables are picked, a good part of their nourishing and taste qualities are lost between harvesting and eating time. Usually, the period is several days because of time spent picking, shipping to farmer's market, then transporting—perhaps to a distant city—for redistribution to food retailers. Furthermore, food may be on display in the retail store a day or two before a housewife buys it. And, even then she may keep the food at home a day or more before serving. During all this time, the food has been robbed of some of its vitamins and minerals. Still more nutrition-giving elements have been lost in preparation and cooking.

Canned foods, on the other hand, are usually prepared only a few hours after the crops are harvested, and their original goodness captured. Sealed against air, light, and other destructive elements, the food preserves its flavor. Canned foods are, nutritionally speaking, only a few hours old from picking time to table.

Besides, cans lend themselves easily to filling, cooking, sealing, lithographing or labeling, shipping and storing. They enable the housewife to have on hand "quickie" meals—ready to serve when unexpected guests drop in or when there isn't enough time for elaborate meal preparation.

Protect Chemicals and Drugs

Certain chemicals and drugs are readily affected by air and light, their value lessened or destroyed. And here is where the tin can comes into the picture again with sure protection from both kinds of damage. Cans also offer an added safeguard against breaking, chipping or shattering. They prevent leakage which is wasteful in the case of all drugs and chemicals and dangerous in the case of the poisonous or harmful ones.

Oil, Paint and Varnishes

Paint products also get their best protection from cans, the absence of breaking, chipping and shattering again proving of particular value. Furthermore, paint can be mixed right in the can, and the paint may be applied directly from the can.

Many Other Uses

During the war, cans were widely used in the packaging of ammunition, equipment and even items like blankets in shipment. They give a kind of protection that no other container can give.

If you have costly troubles with containers that break or tear, or if packaging is so slow as to create a bottleneck in production, it's time to call in a National Can technician. He will be glad to give you the benefit of his wide and extensive experience in making your good products stay good longer. Write or phone your nearest National Can Corporation office. There is one conveniently located near you. 1168

From Citrus Fruits

Inexpensive citrus concentrates retaining a high proportion of vitamin C can be made by treating a vacuum-concentrated juice with lime to precipitate undesirable acids and other unwanted constituents. The product, containing up to 75 percent soluble solids, mostly fruit sugars, can be used in preserves and soft drinks. It is described as without the orange juice character but with a pleasing, mellow sweetness of the natural sugars. 1169

Nuts that Stick

Peanut proteins can be treated to produce both the tacky and the remoistening types of glue. The peanut curd is "preneutralized" before drying, so that addition of water will produce glue solutions of the correct pH. For gummed tapes the peanut proteins have the advantages of uniformity of product, light color suitable for white paper, less tendency of the gummed paper to stick in the roll or stack and a very desirable sanitary condition.

When properly plasticized, nonwarp glues for applying paper to set up boxes are possible. These can be applied cold, are tacky as soon as applied and remain tacky long enough to complete the gluing operations.

Solvent-extracted soybean proteins will probably yield similar results. 1170

Steel-Blackening Processes

It is reported that steel-blackening processes fall into three main types: (1) Oxide coatings formed by heating in air, steam, oil, or molten nitrates, or by immersion in caustic alkali nitrate solutions; (2) phosphate coatings (staining or impregnating) using various mediums in a number of processes; (3) metallic deposits of nickel, molybdenum, and copper, black when applied or blackened after application. 1171

Penicillin Is Prize Food Preservative

It is announced that heat resistant spores which may escape destruction in standard processes for pasteurizing milk and non-pressure canning of fruits and vegetables may be eliminated by penicillin. 1172

Paprika

Spanish and Hungarian Paprika are now successfully cultivated in California. A new type of Hungarian paprika developed is said to be superior to the imported product. 400 acres are under production in the United States. It is estimated that 1,500 acres will supply domestic demand. 1173

Two New Rodenticides

Wartime research has resulted in the development of two important new materials for rodent control—ANTU and 1080. Of particular significance is the fact that they are manufactured from raw materials of American origin, unlike the other common rodenticides used before the war such as thallium, strychnine and squill which depend on materials of foreign origin. Neither of the two new rodenticides is as yet available commercially, and there seems to be a definite prospect that they will never be offered in the open market, but reserved rather for use under the direct supervision and control of government agencies because of their specific toxicity hazards. Product 1080 is said to be based on sodium fluoroacetate. The greatest field of usefulness for ANTU has been found to be in the control of the Norway rat, while 1080 has been found to be highly toxic to all species of rats as well as to all field rodents on which it has been tested. 1174

Laboratory Seal

Plagued by the recurrent problem of sealing a few experimental cans under vacuum or an atmosphere of inert gas, two research workers have devised an electrical gadget that can be set over the vent hole in the can top. At the appropriate time it heats the area around the vent, at the same time melting a pellet of solder and dropping it on the hole, to make a very satisfactory seal. Several cans can be done at one time. 1175

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Subtilin

Subtilin, an antibiotic working on a principle similar to that of penicillin, has been found to be deadly to Mycobacterium, the organism which causes tuberculosis. Experiments in test tubes show that subtilin is scarcely toxic to living tissue in spite of its deadly effect on the tubercle bacillus.

The bacteria from which this drug is extracted is found in air throughout the world. It has been proven effective against other bacteria, including streptococcus, staphylococcus, pneumococcus, and gonococcus, in test tube experiments. 1176

Surface Activity

Anionic surface active agents — that is, antiseptic detergents that are used in neutral or slightly acid solutions—may be effective for washing equipment, floors, and walls. While they do not show an immediate germicidal activity, certain antibiotics are effective over longer periods of time. Not being poisonous, they are safe for food plant applications. 1177

Cull Peas Put to Good Use

The time will come when housewives will only purchase high quality canned peas. Processors should be alert to profitable uses for their low grade or cull products.

Results of several experiments show that ground cull peas make an excellent protein supplement for fattening hogs, if properly balanced with a small amount of meat meal. Hogs under these tests made an average daily gain of 1.40 pounds, while hogs in the check tests showed only 1.10 pounds daily gain and were unthrifty, thin and lost considerable hair. These studies corroborate previous research on feeding peas to white rats. Peas have been found to be an excellent protein source. 1178

Coffee Remade

Not only are we to have coffee "soluble", but a patent now promises us soluble coffee powder reformed into the shape of coffee beans and lightly glazed to look like real coffee beans. It is reported to be nonporous, nonstaling and nonhygroscopic. 1179

Still Need Tin

Germany started in 1937 a program to catch up with the canning industry in the U. S. and Britain. However, with all the intensive search for substitutes, our scientists investigating industrial advances in Germany report that the German planners did not believe they had any prospect of solving the problem of doing without tin. 1180

Technical Topics

GRAMICIDIN IMPROVED — It is announced that the addition of formaldehyde to gramacidin renders it less harmful to animal tissues and red blood corpuscles. 1181

TUBERCLE DISINFECTANTS — A patent has been issued for disinfectants designed principally for combatting tubercle bacilli. The disinfectants comprise hydroxyalkyl and hydroxyalkylene substitution products of benzene with a nuclear alkyl or alkylene group. They also comprise a quaternary ammonium compound containing a higher aliphatic hydrocarbon radical (C_6 or more), which increase their water solubility. 1182

PROTECTIVE COATING FOR COAL PILES — Bituminous coal stored in piles is protected against wetting, wind losses, disintegration, and spontaneous combustion by spraying thinly with a moistureproof and airproof coat or film of asphalt, tar, or wax. The coating is applied in the form of an emulsion at the rate of 1 gallon for 2 square yards to 3 square yards of surface. 1183

NEW FUNGICIDES — A patent has recently been issued for a fungicide for a variety of uses The fungicide is formed with dimorpholinthiuram bisulphide as its active ingredient (0.25 percent) in water, with lime and bentonite as an adherent carrier. Another patent has been issued for a similar solution of phthalic diphenylguanidin of the same strength. 1184

OIL AND SOFT DRINK COLORINGS — Rottlerin, extracted from kamala with benzene or ethyl alcohol, is announced as the new basis of yellow colorings for oils and for soft drinks. For coloring oils, the Ac_2 derivative is used; soft drinks are colored with the Na_6 or Na_2 derivatives. 1185

PREVENTS MOLD IN ADRENALIN SOLUTIONS — Use of potassium metabisulphite (0.1 percent), instead of chlorobutanol, is suggested for the prevention of mold in solutions of adrenalin. Tartaric acid is suggested instead of hydrochloric acid to give the desired pH. 1186

WAX-FREE LUBRICANT — A new nonpetroleum lubricant for automobile, aircraft and other internal combustion engines has been developed and tested. It is claimed to have unusual advantages over mineral oil, particularly in cold weather. 1187

SULFAPYRIDINE AS A HEMOSTATIC AGENT — Local application of sulfapyridine powder to wounds after removal of lesions by electrodesiccation, cutting current or cautery is especially useful in producing hemostasis. This method is claimed superior to gentian violet solution. 1188

NATURAL GAS FOR CALCIUM CARBIDE — A patent has recently been issued for a new method for making calcium carbide, in which crushed limestone is combined with natural gas instead of with crushed coke as is the present practice. 1189

WATER IN DRY FOODS—A new method for rapid determination of the moisture content of dried foods has been developed. The method is based on titration of a methanol suspension or solution with a complex reagent containing iodine and SO_2 dissolved in pyridine and methanol. 1190

TUNG AND LINSEED OIL SUBSTITUTE — Garampa, a vegetable oil described as of "possible commercial interest" is receiving new industrial attention. Considered an excellent substitute for tung and linseed oil, it is reported that 15 million kilos a year can be produced. 1191

NEW FUNGISTATIC — A fungistatic which shows marked promise in control of fusarium wilt, a destructive disease of tomatoes, has been obtained from a preparation made from the expressed juice of the Pan American Tomato. This antibiotic has been designated lycopeisicin. 1192

CLEAN COATINGS—One suggestion for use of the bactericidal property of colloidal silver is to adsorb the atomic silver on or in colloidal carbon particles and incorporate colloid so produced with suitable binders to form coatings. 1193

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York 17, N. Y. Please mention the number at end of article — also name of the magazine you saw it in.

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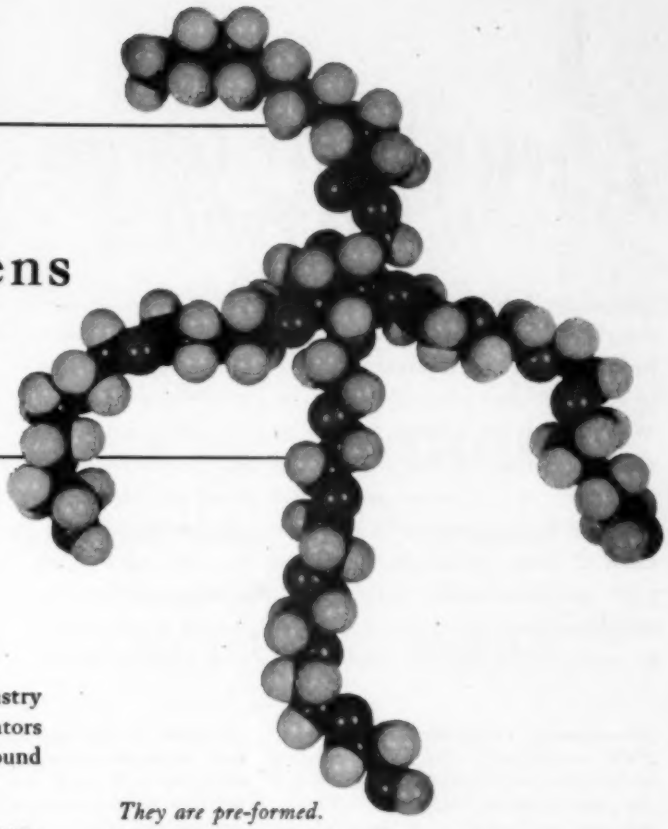

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Aluminum Chloride, Anhydrous, $AlCl_3$ is principally used as a catalyst for Friedel-Crafts synthesis, polymerization, isomerization, halogenation. These reactions are important in the production of high octane gasoline, lubricants, synthetic rubber, dyes, pharmaceuticals, photographic chemicals, etc. Hooker Aluminum Chloride is a grayish crystalline solid which fumes in moist air. It is available in three sizes. It is a particularly pure product containing a minimum by weight of 99% aluminum chloride and a maximum iron content of .05%.

Antimony Trichloride, Anhydrous, $SbCl_3$ is used in the petroleum industry as a catalyst (with $AlCl_3$) to convert normal butane to isobutane and in various hydrocarbon oil treatments. It is also used as a catalyst in organic synthesis; in the manufacture of dyes and pharmaceuticals; preparation of antimony salts; as a mordant in calico printing; in antimony plating; in bronzing iron and other metal treating processes. In a muriatic acid solution it forms a coating of antimony on iron retarding corrosion. Hooker Antimony Trichloride, Anhydrous, is a yellowish crystalline solid of 99% minimum purity. Iron and arsenic are present in a maximum amount of 1% and it is entirely free from lead.

Arsenic Trichloride, Anhydrous, $AsCl_3$ is used in the manufacture of synthetic organic chemicals containing arsenic for insecticides, war and police gases. The Hooker product is a clear, colorless to pale yellow liquid, containing 99.5% minimum, arsenic trichloride.

Ferric Chloride Solution, $FeCl_3$ is used in sewage treatment, in photo engraving, for photogravure and heliogravure, as mordant in dyeing and printing textiles, for the manufacture of other iron salts, paint pigments, iron pharmaceuticals, as an oxidizing agent in making dyes, as a general disinfectant. It is a dark orange-red syrupy liquid with a Ferric Chloride content of 40 to 45% and a ferrous chloride content of .20% maximum.

Help from Hooker Technical Staff

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Among other suggested uses for this compound are the manufacture of foam resistant compounds, leveling agent in polishes and waxes; lubricant for plastic molds, additive to water to increase solubility of many organic compounds. Technical Data Sheet 745 gives physical and chemical characteristics and other information. A copy will be sent you on request.

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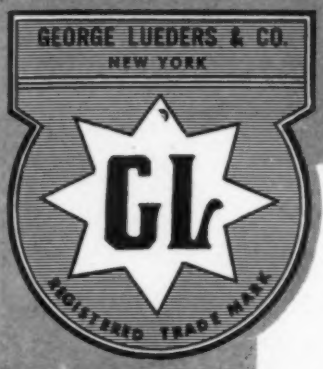

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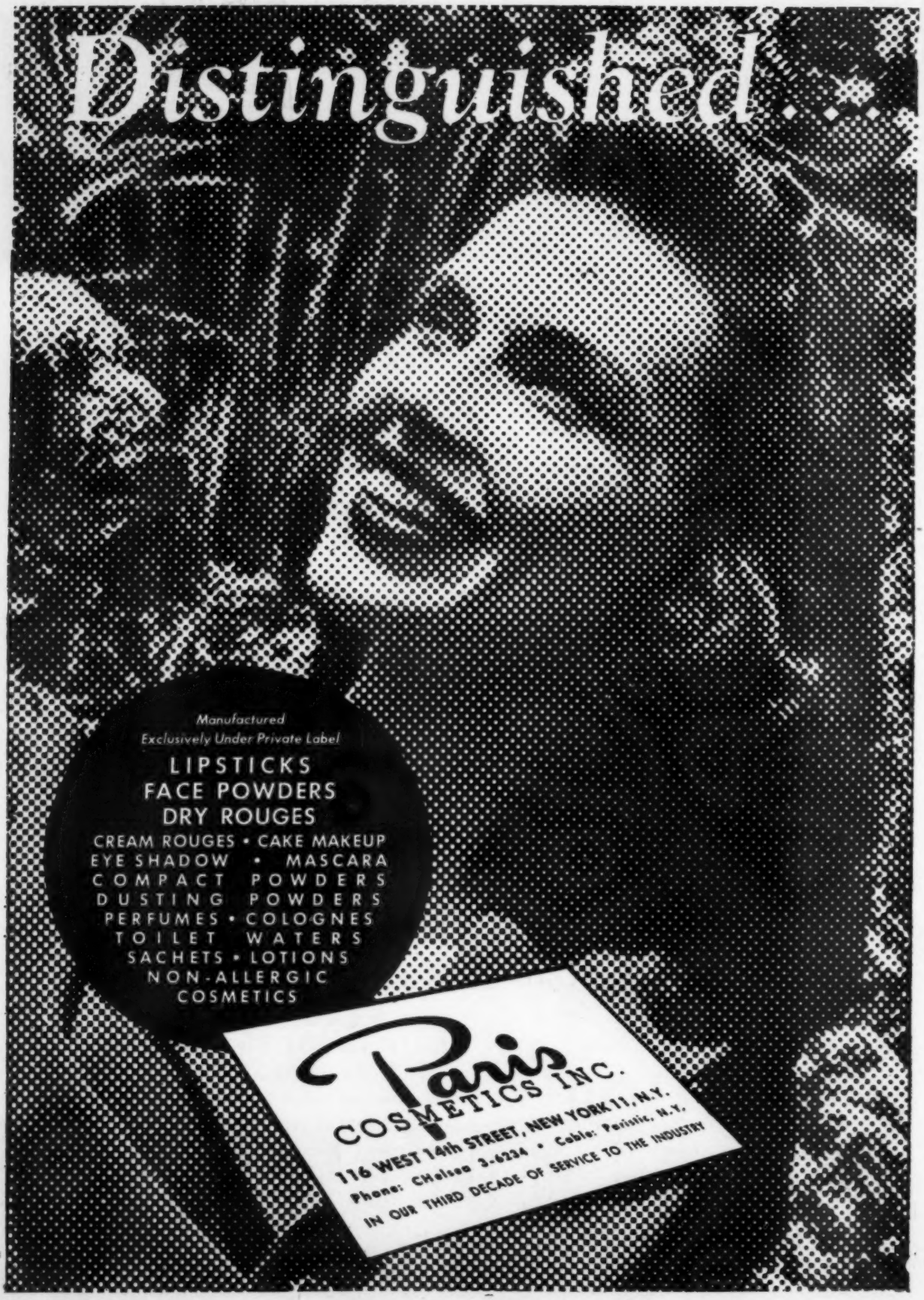
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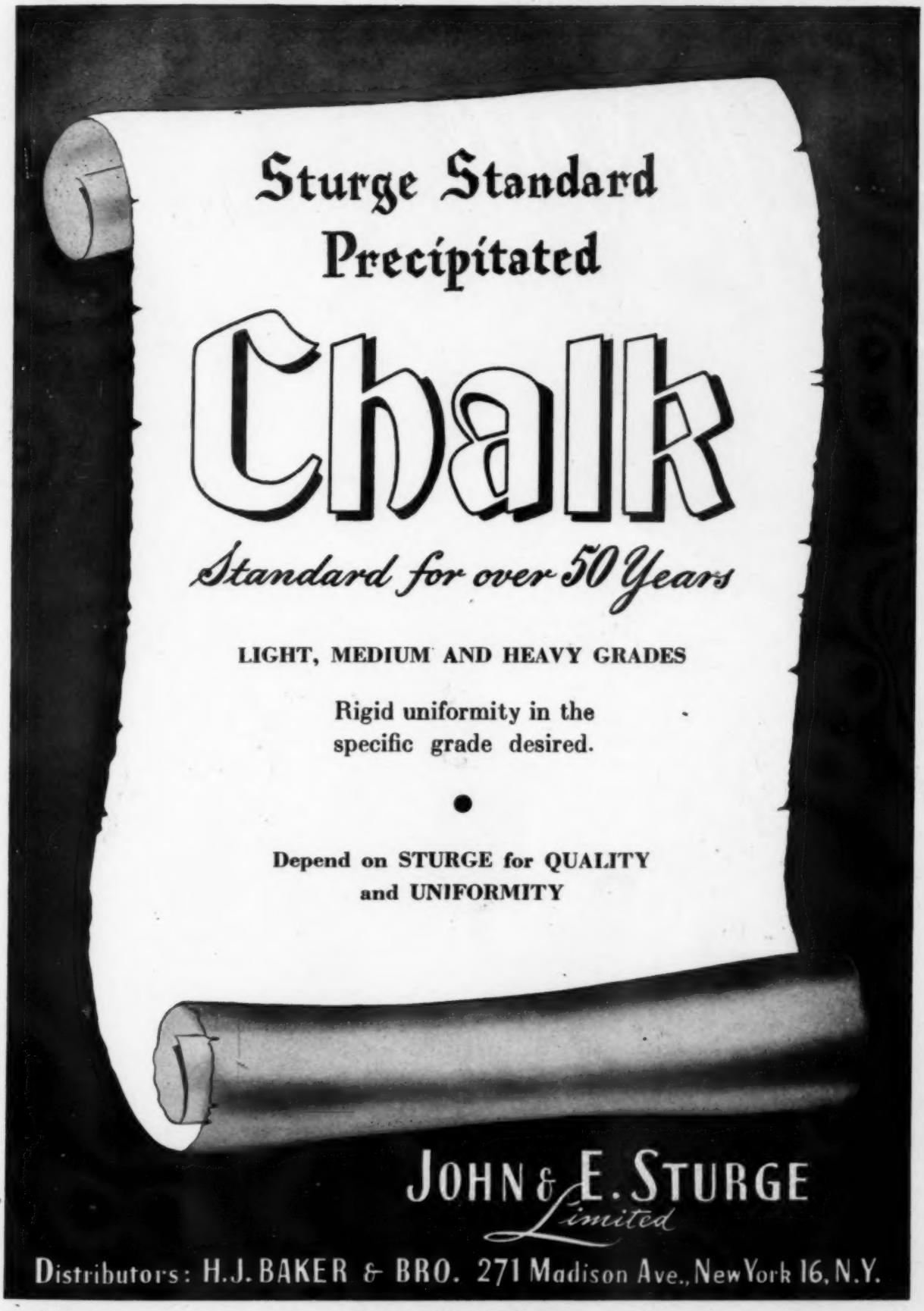
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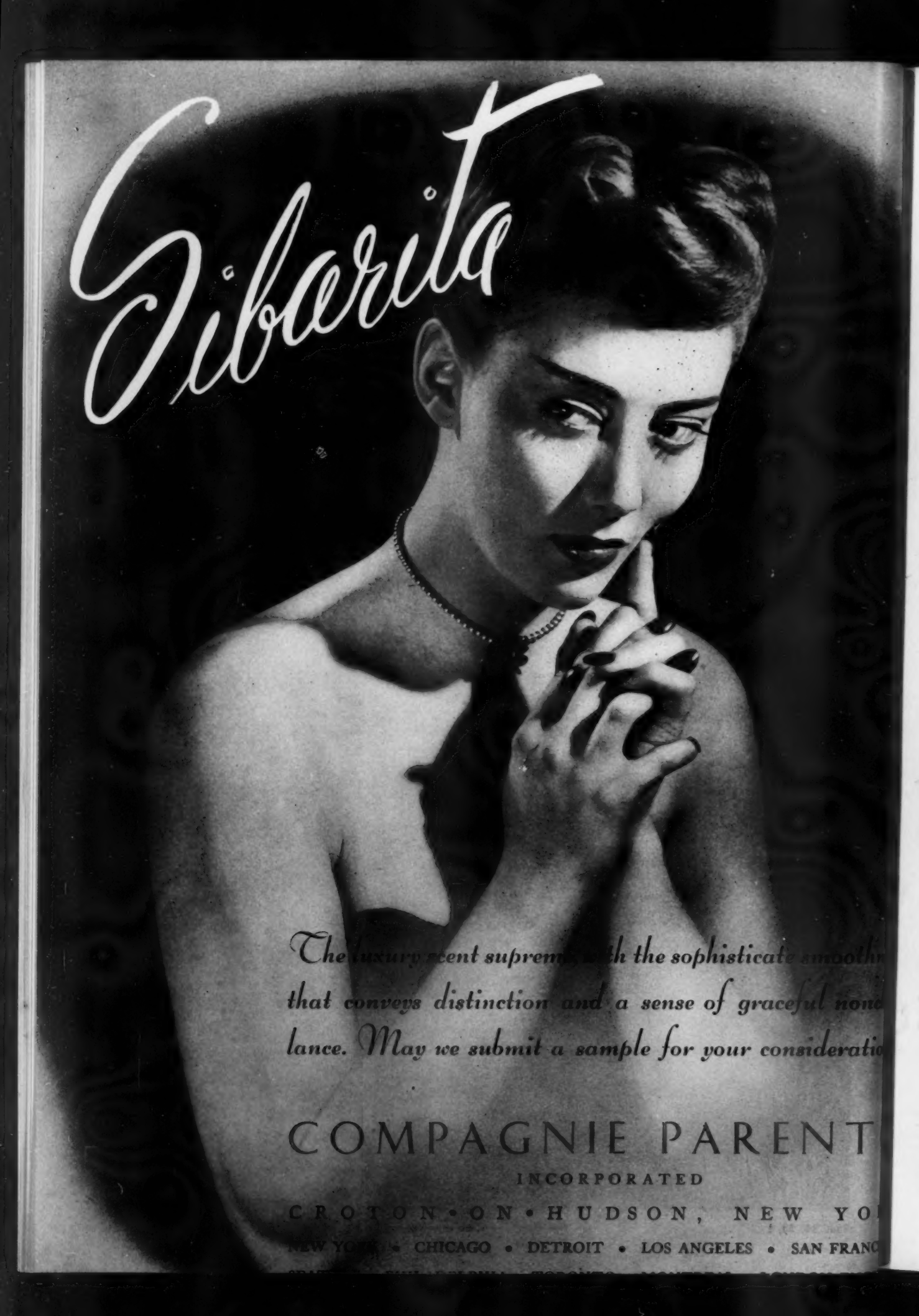
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HIGHLIGHTS FROM THE JANUARY ISSUE

American Druggist

THE BUSINESS MAGAZINE OF EDITORIAL VITALITY

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A Tough Question for Sundry People

"Why can't wholesalers offer new sundries as soon as chains?" is the question presented by an independent druggist of Des Moines. It is a question for manufacturers as well as wholesalers. Our pages are open to all who care to contribute to a solution.

Better Cosmetic Clerks

Down in North Carolina, an association recently sponsored a two day school in cosmetic selling which attracted 50 girls from 50 stores. After you read the article, you may want to offer assistance to similar schools, for this is a new idea that deserves duplication elsewhere.

Serving the Drug Industry Since 1871

1946 marks American Druggist's 75th anniversary, making us the oldest independent journal in continuous publication in the drug industry. Starting off a series of notable historical articles, the January issue contains a chronological history of pharmacy, science and the world that will take an important and permanent place in pharmaceutical literature. Write for a reprint for your permanent files.

The Rush of New Products Is On

A few months ago, our Display Room of What's New carried mention of only 15 new products. Now we're publishing pictures and descriptions of 50 or more in each issue. Easy to find, on page 8, this valuable department is open to all who make a product that can be sold in drug stores. Druggists and sales executives alike find it a quick guide to trends in products and package design.

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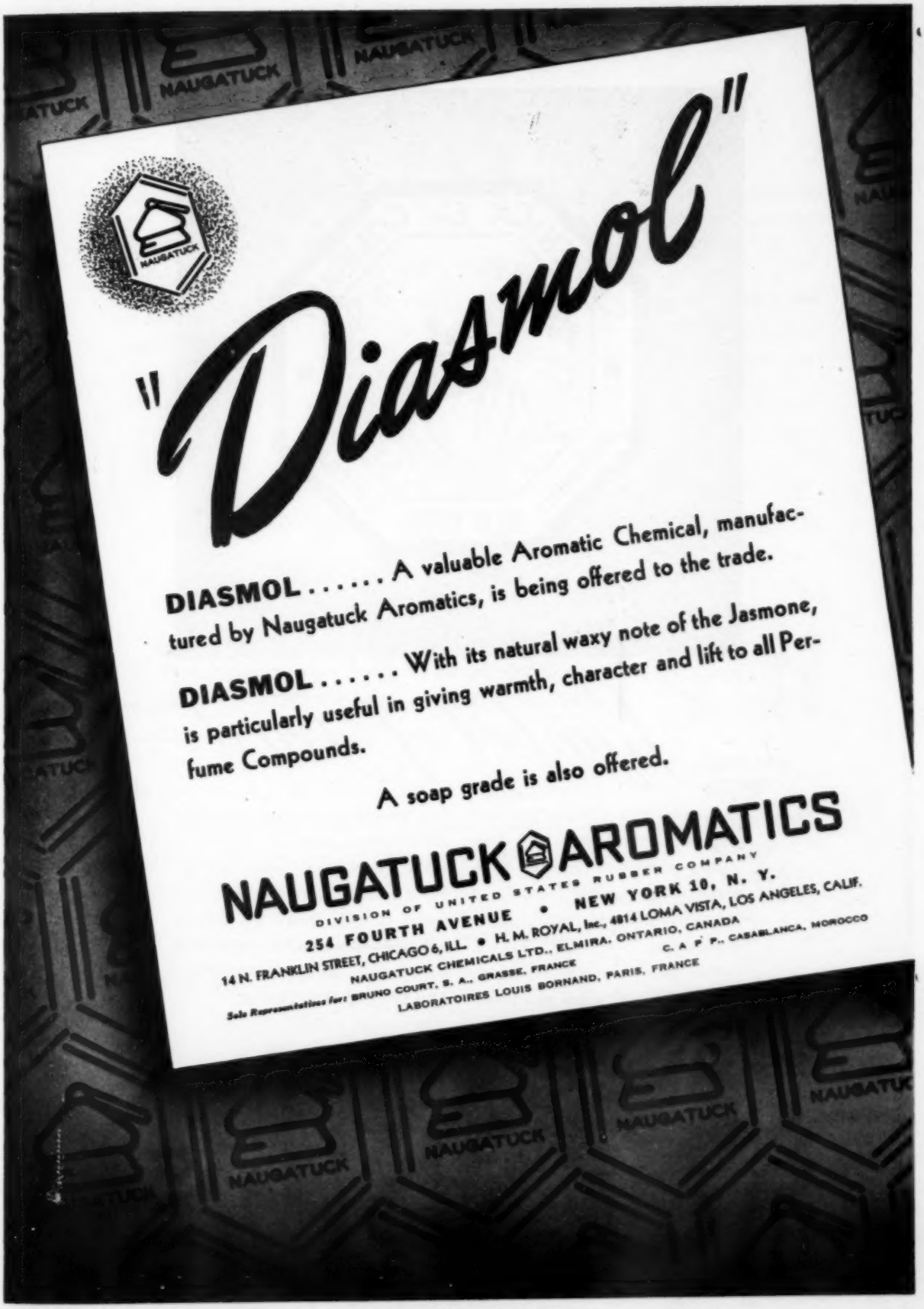
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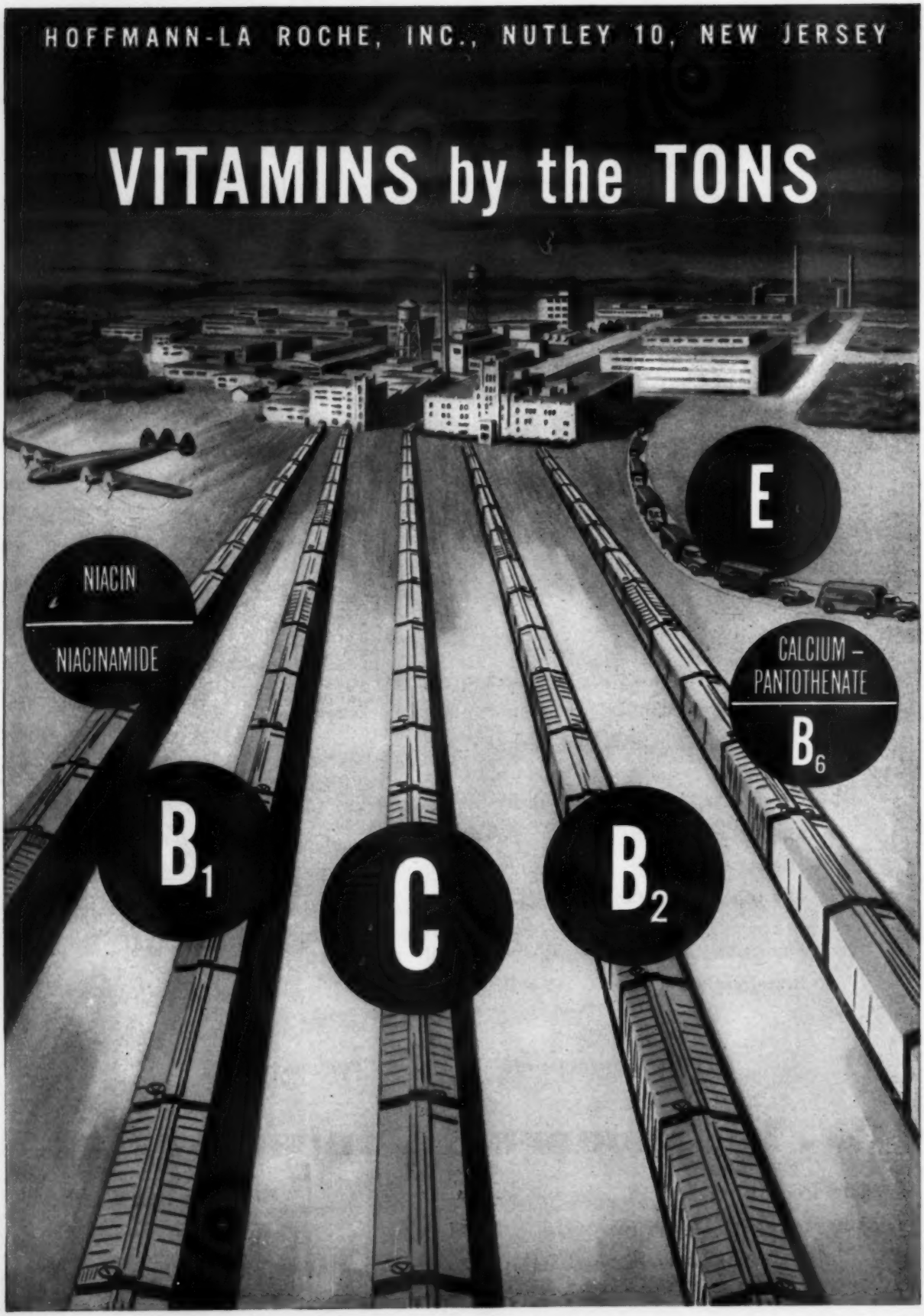
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KEEPING POSTED

Wholesalers Anti-Trust Case Closed

THE ANTI-TRUST proceedings brought against the National Wholesale Druggists Association, twenty-three wholesale drug corporations, and twenty-nine executives four years ago has finally been terminated. Early this month in the U. S. District Court for the District of New Jersey the Government filed a nolle prosequi (dropped the case) against all individual defendants named in the indictment. Immediately thereafter counsel withdrew the plea of not guilty in the case of the coporate defendents, and interposed the plea of nolo contendere. Then the court imposed fines upon the corporations. As the indictment contained only one count, $5,000 was the maximum fine that could be imposed on any corporation. As a matter the fines imposed, as recommended by the Government, ranged from $1,500 to $5,000, for a total of $87,000.

When we think back to the laborious investigation which led up to this finale, we certainly feel that the "mountain labored and brought forth a mouse." All must recall the seizure of complete records for a number of years back from the manufacturers who did business with the members of the N. W. D. A. All of these voluminous records, containing all bills, all correspondence, and everything else that was available were shipped to Washington for study. Manufacturers were greatly inconvenienced by the loss of these records but that was of no consequence,—the Government was after something important. At that time, which was the crest of the New Deal policies, all sorts of speculation was indulged in as to what the outcome of the investigation would be. Some thought that the right to choose one's customers and other fundamental tenets of American business were threatened. Now the entire thing winds up with paltry fines against corporations. The legal fees of the corporations were certainly greater than the fines, and the cost of the case to the Government was far greater than the amount of money collected in the fines.

Inflation At Work

THE INFLATION that is most certainly coming in this country, and of which we have written several times before, can now be clearly seen in the making. Offers of increased wages are being made all along the line, and the strikes are occurring for the main and simple reason that the offers are not big enough. One of the outstanding tip-offs that the Government is in sympathy with the inflationary trend is its decision to allow an increase in the price of steel so that wages in the steel industry can be raised. The only hesitation, or indecision on the part of the Government and others close to this situation is how much should be allowed at this time and how much should be held back for later raises in the wage scales of the various industries.

The man who was dismissed from the service of the Government for the reason that he plainly stated that wages would be upped 50 per cent in the next few years apparently knew what he was talking about, the only trouble was that this information was not to be given out so plainly and he was in the embarrassing position of having talked too much and too plainly. While fundamental economics seem to have been out of fashion during our many years of deficit financing, basic policies are coming home to roost. And the one thing that is most difficult to handle is the enormous debt built up by this policy of deficit financing. There is only one way to make the debt fit the income of the country so that taxes will not have to be high enough to stifle initiative, and that is to increase the income of the country. And the only way to increase the income of the country is by raising prices of everything and raising the wage scales.

Drug Trade Dinner Resumed

THE DRUG Trade Dinner, sponsored by the Drug, Chemical, and Allied Trades Section of the New York Board of Trade is being resumed this year now that the war has ended. The dinner to be held March 14, at the Waldorf-Astoria Hotel in New York, will be the twentieth such affair, and there are indications that this year's dinner will be a sell-out as was the case at the last dinner before the affair was cancelled in keeping with wartime conservation. Committees are functioning and the plans are all set. Those who want to attend the dinner had better send in their reservations.

Rising Plant Costs Bar Expansion

POSTWAR plans of manufacturers are being seriously threatened by the sharply rising costs of construction and equipment. Many drug, cosmetic, and chemical manufacturers had laid plans for expansion of plant facilities and money was made available for this expansion. But so swiftly has costs risen since last year when the plans were projected, that they have doubled for many projects. More disturbing still are many cases in which contractors will not take construction jobs except on any but a cost plus. There is an instance of a manufacturer who prepared last year to spend $480,000 for research facilities which cost only $200,000 prior to the war, but which cost rose to $750,000 by V-E Day, but which is estimated at $1,000,000 with no contractor willing to take the job except on cost plus. There this manufacturer is wondering if his plans for expansion can be accomplished on anything like a sound basis. Another manufacturer is reappraising a $22,000,000 expansion program for the reason that a plant projected at a cost of $1,500,000 during the war, now will cost $3,000,000 to complete. Another producer who prepared for a $25,000,000 expansion program by borrowing additional capital, now believes that higher costs will force him to undertake substantially less than he had planned because of the prospective shrinkage of the return on the investment.

Sulfa Drugs for External Use

A MANUFACTURER who distributed products containing sulfa drugs for self medication was recently fined $1,000 and given a suspended jail sentence upon action brought against him by the Food and Drug Administration. A number of charges were preferred, namely that the manufacturer did not include in the preparations the amounts of ingredients claimed on the labels, no warnings were given on the labels, new drug applications had not been filed, the labeling of the nasal preparation contained false and misleading statements concerning its value in the treatment of colds and sinus conditions, and that the labeling of the external product contained false and misleading statements concerning the value of the product in the treatment of eczema, psoriasis, and other skin disorders.

Sulfa Drugs on the Skin

CONCERNING the indiscriminate use of sulfa drug preparations on the skin the minutes of the House of Delegates of the American Medical Association included a resolution of the Section on Dermatology and Syphilology, reading:

"Whereas, local and general sensitization to sulfonamides sometimes of a serious nature are being reported with increasing frequency following topical applications in relatively minor diseases; and

"Whereas, the local use of these drugs may prevent their subsequent administration in illnesses of a serious nature; be it

"Resolved, That the Section on Dermatology and Syphilology condemns the present indiscriminate local use of sulfonamides in diseases in which other ordinarily less harmful remedies are equally efficacious."

Central American Botanicals

MORE and more Central American countries are participating in the botanical drug business of this hemisphere. Ipecac is one of the leading export items of Nicaragua and Costa Rica. El Salvador is the chief source of supply for balsam. Costa Rica and Honduras are supplying sarsaparilla. Guatemala and Costa Rica are developing a cinchona plantation industry. Guatemala also is planning cultivation of digitalis and belladonna. This development was largely stimulated by the heavy needs of our fighting forces during the recent war. It seems certain that strong attempts to maintain the places that they have obtained in these markets due to the war influences will be made by these countries.

Drug Store Reconversion

DRUG STORES are believed to have more elaborate reconversion programs than most other retailers. Druggists planning to build new units or revamp old ones have been the loudest in protesting through their associations against the plan to channel 50 per cent of all construction materials into housing.

Cosmetic Sales Future

SALES volume of cosmetics for the 1945 Christmas has been, beyond any question, the all time peak in cosmetic sales. So far surpassing any other year was 1945 Christmas volume, that some people are predicting that this peak will be unmatched for at least ten years. The reasons given—all time high in wages and employment, a spending spree of business and the public, lack of other merchandise diverting abnormal purchasing to perfumes and cosmetics.

Now the big question facing the industry is: Can we hold wartime gains? Meaning, will there be a drop from 1945 volume or will the industry continue normal gains of 5 to 10 per cent? Here are some facts. Add some you know and make your guess.

Positive: 1) Because of the war, defense plant work, and vastly increased social intercourse, the industry has gained by several million new customers. This is the result of the war, the result abroad. It's a positive.

2) More employment at higher wages; greater employment for women.

3) Expansion of the domestic cosmetic market along new lines as the men's field, teen age cosmetics, and children's cosmetics which are competing with games and toys as gifts.

4) Greatly increased space for cosmetics as indicated by the expanding cosmetic departments in department stores. Greatly increased attention to cosmetic merchandising by chains. Better cosmetic merchandising by independent drug stores. And increased size cosmetic departments in specialty stores.

5) The world market, which has been expanding for many years, is now open to America.

Negative. (1) Large variety of products from nylon stockings to refrigerators will soon again compete for the available dollars.

2) Possible decrease in the employment of women.

3) Effect of the 20 per cent luxury tax on cosmetics if not soon repealed.

One Reason for Absenteeism

A MANUFACTURER recently explained to us his experience with absenteeism in his plant where the worker alternated between a short week and a long week. A short week was five days, while the long week was seven days with time and one-half for the two extra days. The workers were never absent during their long weeks because if they were absent they lost the overtime that paid more money for the same amount of work. But during their short weeks during which pay was at the normal rate, they took time off. Not much could be done about it, he said, and we agree with him.

Biological Warfare

IT WAS only revealed early this month that Sir Frederick Banting, discoverer of insulin, was killed in 1940 in an airplane crash in Newfoundland while engaged on important work having to do with the development of counter-measures against possible biological warfare against the American continent.

With reference to biological warfare, George W. Merck, president of Merck & Co., and special consultant on biological warfare stated this month that although biological warfare has not been used in military operations, research work in this field must be continued in peacetime on a sufficient scale to provide an adquate defense.

"The findings of the United States in this field along with the findings of groups engaged in similar work in the United Kingdom and Canada have shown that this type of warfare cannot be discounted by those of this nation who are concerned with the national security," Mr. Merck said. "It is clear that the development of biological warfare could very well proceed in many countries, perhaps under the guise of legitimate biological research."

Important accomplishments of the program, revealed in general terms, included:

1. Developments of methods and facilities for the mass production of micro-organisms.
2. Development of methods for rapid and accurate detection of minute quantities of disease-producing agents.
3. Production and isolation for the first time of a crystalline bacterial toxin which has opened the way for the preparation of a more highly purified immunizing toxoid.
4. Development and production of an effective toxoid to protect large scale operations.
5. Significant contributions to knowledge of the control of airborne diseases.
6. Development of protective clothing and equipment.
7. Information on the effects of more than 1,000 different chemical agents on plants.

Evidence to date indicates that the Axis powers were behind the United States, Canada, and Great Britain in this work. Steps are being taken to permit the release of such technical papers and reports as may be published without endangering the national security. The Japanese army fostered offensive developments in biological warfare from 1936 until as late as 1945. While definite progress had been made, the Japanese had not at the time the war ended reached a position whereby these offensive projects could have been placed in operational use.

Drug Store Sales at Peak

ALTHOUGH most essential drug store merchandise is selling at or below prewar price levels, says the National Wholesale Druggists Association, retail drug store sales during 1945 reached an estimated record volume of more than $3,000,000,000, and, as the year end approached, the trend continued upward. This figure compares with $2,855,000,000 in 1944, and $1,821,000,000 in 1941. So, with no general rise in drug store prices, the dollar volume of drug store sales nearly doubled during the war years in spite of shortages of some traditional merchandise. The N. W. D. A. further states that its members plan to expand their sales forces by more than 20 per cent during 1946.

Postwar Detail Staffs

WITH the war over, ethical drug manufacturers are attempting to put into effect their postwar plans of increasing their detail staffs. Whereas before the war some of the largest pharmaceutical drug manufacturers had detail staffs calling on doctors of about 450 men, with one manufacturer employing 600 or more trained detail men, all of the large manufacturers are anticipating increasing the number of men so employed. Some manufacturers are basing the number of detail men on the number of doctors in the country, giving each detail man a small enough number of doctors to cover so that a new specialty can be placed before the entire medical profession in a certain minimum time. The manufacturer who employed more than 600 detail men before the war is reported to be planning a postwar staff of somewhere between 800 or 900 men. Those who employed 400 or 450 men are planning to jump to 600 or more.

The question that will be raised by this sharp increase in detail men is when are the doctors going to get the time to interview them all? After all, doctors are busy men and under present conditions it is not uncommon for them to have two or three detail men waiting in their offices to see them. If, as, and when detail staffs are increased sharply, competition for the attention of the doctor on the part of the detail man is going to be severe. More intensive training of the detail men will be necessary as a matter of course. The reputation of the house sending the detail man will have an increasing influence upon whether or not he will get into the doctor and get his message across. In other words, a determination to increase the number of detail men is not enough in itself; there are many other factors that have to be considered.

Conventions Ahead

CONVENTION plans are getting under way for the annual Spring meetings. The American Drug Manufacturers Association has set its convention for May 6 to May 9 at the Cavalier Hotel at Virginia Beach, and the American Pharmaceutical Manufacturers Association has set its convention for the last week in May at Grove Park Inn, Asheville, N. C. The American Pharmaceutical Manufacturers Association has also made plans for its 1947 meeting to be held during June at the Broadmoor Hotel, Colorado Springs.

T. G. A. Scientific Meeting

THE MEETING of the Scientific Section of the Toilet Goods Association held in New York during December struck a new high note in the meetings of this Section of the Association. The number attending the meeting was large, as it has been at previous meetings. However, there was a most significant difference in the type of people in attendance at the latest meeting. This time the very great majority of those in attendance were scientists of manufacturing firms from all over the country. This was quite a change from previous meetings which were treated as more of social gatherings with all types of executives and others coming to the meeting merely for pleasant chats with other people and for the purpose of attending an industry lunch. There was a real note of seriousness about the latest meeting that means that the Scientific Section is now established on a sound basis. It should now continue to move forward, becoming increasingly of greater value to cosmetic manufacturers all over this country.

A. P. M. A. Mid-Year Meeting

ONCE again the American Pharmaceutical Manufacturers Association staged a Mid-Year Meeting in New York that was outstanding for the subjects presented and for the quality of the speakers who discussed the various subjects. The top authorities of the country presented papers on the most important problems of therapeutic research, the patent system of the country, pharmaceutical manufacturing and research projects, Pan-American pharmaceutical marketing, drug regulation, and other timely subjects. The presentation of the Seventh Annual Scientific Award to the Rockefeller Institute for Medical Research, and the Tribute to Lieut. Col. Ralph R. Patch in recognition of his patriotic contribution to our country in World War II were high points in this wonderful program.

Dental Decay Tablet

A TABLET to control dental decay and containing vitamins C and D in combination with a fluoride is suggested by Dr. Jan P. Beaudet of Quebec as a result of experiments. He looks upon this type of product as a more practical method of control than the fluorination of water.

Socialized Medicine and Drugs

APPARENTLY socialized medical plans cause the consumption of drug preparations to increase rather increase from the point of view of prescriptions. Regarding this phase of the Social Security Plan in New Zealand, the Christchurch "Star Sun" recently said:

"Heavy expenditures on social security prescriptions was the subject of comment in the annual report of the Health Department tabled in the House yesterday. It was stated that the cost of this benefit, which last year was £980,237, compared with the previous year's expenditure of £762,198, continued to rise, and represented an expenditure of 12/3 a head of the population.

"The increase was explained as being due to extensions of the drug tariff, and the higher costs of drugs, but the actual rise in the number of prescriptions was still very marked."

Non-Sticky Chewing Gum

CHEWING gum that will not stick to floors or furniture is something that is in the offing. It will be based on domestic plastics rather than upon the imported vegetable gums.

Fair Trade Worries

THE FUTURE status of price maintenance under the Fair Trade Acts is causing much worry to those who are in favor of these laws and who have been operating under them with much satisfaction for many years. The worry is caused by the possibility of the repeal of the Miller-Tydings Act—the Federal law which allows manufacturers to operate interstate under the Fair Trade Acts of the forty-five States that have such laws. The threat to the Miller-Tydings Act has resulted from the attempt to enact a Fair Trade Act for the District of Columbia. At an earlier date Congress passed such an act, but President Roosevelt vetoed it. It will be recalled that when the Miller-Tydings Act was enacted it passed Congress as a rider on an appropriation bill. President Roosevelt was forced to sign the bill but sharply criticised the practice of putting bills through as riders to other bills.

In the present attempt to enact a Fair Trade Act for the District, great difficulty has arisen. Many representatives of citizen's associations and other groups have appeared at the hearings to oppose the bill. One of the tabloid papers of the District has run a number of articles rather critical of certain associations who are extremely active in supporting fair trade. The Federal Trade Commission has released a lengthy document opposing fair trade, and statements made in it, together with statements already made by the Department of Justice, practically recommend the repeal of the Miller-Tydings Act. Much action on the part of those who want fair trade continued is essential to save it.

Harmful Drug Advertising

ADVERTISING of proprietary drugs took a kicking around in an article appearing recently in "Editor and Publisher". In part it read:

" 'Beautify Bust Without Massage?'; 'Rupture Troubles Ended'; 'Shoot Your Piles'; 'Husbands! Wives! Want New Pep and Vim?'; 'A Local Lady Spit Up Acid Liquids for Hours After Eating'—so read the headlines of the patent medicine ads now appearing in our daily newspapers.

"Reading through a cross section of U. S. daily papers, one is confronted with an array of patent medicine advertising claiming cures or relief for almost anything you can think of. The Better Business Bureau, the Post Office Department, and the Federal Trade Commission are waging a constant war on such misbranded merchandise, unsupported claims, and in some cases adulterated products.

"Many of the products are nothing but laxatives put up under fancy labels and trick names. Almost all of them skirt the borders of legality in their claims, a few of them warn: 'Caution, use only as directed.

"Some of these remedies may be medically okay—we don't know. But it is obvious that many are quack applications.

"Newspapers are doing the value of their advertising columns irreparable harm by selling space to these 'fakes', People who are fooled by these claims will begin to doubt the truthfullness of all advertising in the newspaper's columns.

"We believe advertising managers should refuse to accept patent medicine advertising until it has been given a clean bill of health from the FTC, the Post Office Department, or the local Better Business Bureau."

There is no doubt that anyone engaged in the drug business will stare with wonder at some of the advertisements that appear in some magazines and some newspapers. However, one cannot select headlines of advertisements and prove a case as oftimes if one reads the text of an advertisement the headline is perfectly sound although it might appear absolutely false or misleading when taken alone. It is unfortunate that the Federal Trade Commission cannot control this situation but it seems the actions of the Commission do not sufficiently scare these people who often, when stopped under one name, simply change the name and resume the practice. The Proprietary Association and other interested bodies in the drug field stand ready to aid publishers and others in the censoring of advertising of drug products. But evidently the publications taking this type of copy want only the revenue and do not care whether or not the advertisements are truthful or not. The blame not only rests with the outer fringe of drug manufacturers, but it also rests with the outer fringe of publishers.

Price Control of Drugs and Cosmetics

OPA price control over drugs and cosmetics, which was expected to be removed early in January of this year, appears to remain with us a while longer. Members of the OPA doubt that there will be any change in the situation until March 15 at the earliest, and many who are well informed do not anticipate removal of price control over the products of this industry until June 30, the end of the Government fiscal year.

Botanical Drug Research

MORE than 50 manufacturers of packaged medicines and chemicals, and importers of botanical drugs recently decided to form a drug research foundation to study the therapeutic and pharmacological effects of medicinal drugs. While the foundation idea was sponsored by members of the Proprietary Association, it will be an entirely independent organization financed by manufacturers and importers whether or not they are members of the association, according to Dr. Frederick J. Cullen, executive vice-president of the Proprietary Association, who was the prime mover in the foundation's development. Lupton Patten, president of the Chattanooga Medicine Company, who was named chairman of the organizing committee said: "The foundation will serve still another useful social purpose." Many small manufacturers "do not have sufficient resources to undertake research appropriate to their needs and necessary to their continuance in business. The foundation, supported by large manufacturers as well as small, will provide them with research information which they urgently require."

Drug Makers Research Plans

DRUG manufacturers who would tackle medical research in a formidable way should, according to Dr. Austin E. Smith, secretary of the Council on Pharmacy and Chemistry of the AMA, 1) Donate worthwhile sums of money for pure basic research; 2) Establish livable fellowships and endow chairs for experimental therapeutics and the basic subjects involved; 3) Establish or participate in pools or other sources of combined effort for investigation of the broader medical problems; 4) Make available sufficient funds to meet the cost of investigations for the firm, the cost to include department overhead and depreciation; 5) Consider cooperative projects if the cost for a single drug investigation is prohibitative for any one firm.

A Clever Luncheon Menu

A CLEVER luncheon menu on which all items served consisted wholly or partially of products or by-products of the parent company was recently held during the annual sales meeting of the Strong Cobb Division of Standard Brands. The Martini cocktails were made with Fleischman's Gin, and the Manhattan cocktails with Fleischman's Preferred blended rye whiskey. At the meal the following items were served: V-8 Cocktail; Boullion with Sherry (Stox Granulated Bullion); Cheese Omelette a la Chevelle (Shefford's Chevelle Cheese, Blue Bonnet Margarine); Lima Beans, Green Peas (Fleischman's Frozen Vegetables, Blue Bonnet Margarine); Tomato Aspic Salad with Asparagus Tip Garnish (Royal Salad Gelatin, Loudon TomatoJuice, Fleischman's FrozenAsparagus, Blue Bonnet Margarine); Blue Bonnet Salad Dressing; Cloverleaf Rolls (Fleischman'sYeast); Blue Bonnet Margarine; Peach or Apple Pie with Chevelle Wedges (Fleischman's Frozen Fruit, Shefford's Snappy Cheese); Hot Coffee (Chase and Sanborn); Hot Tea (Tender Leaf). We were most surprised that the Strong Cobb Division did not supplement the meal with some vitamin capsules, but maybe they thought that it would be an insult to the food products of the parent company to imply that this meal was lacking in a very full measure of the necessary vitamins.

A Basic Reason for Strikes

WE recently heard a relatively small, but highly intelligent manufacturer, who is having labor troubles, express his opinion of the conditions that are causing a great deal of the trouble. His idea was that many of the workers are relatively new to industry, have been making a great deal of money during recent years, and have been working rather steadily for a long period of time. They are young and have the thoughts and tendencies of youth. Therefore, they take strikes rather as an adventure. There is a certain romance to it like playing hookey from school. They are in a fight for a cause and they are able to thumb their noses at their superiors—all of which they relish very much. Therefore, they are perfectly willing to vote for a strike, and, when it comes, they are happy. We think that this describes the situation very well, but we wonder what can be done to overcome this sort of psychology.

Development and Marketing of Pharmaceutical Specialties

By WILLIAM T. DOYLE and A. R. SAVINA

It is generally agreed that pharmaceutical specialties make up an important part of the medication prescribed by physicians. Numerous surveys have confirmed the fact that doctors are simplifying their prescription habits. They are depending more and more on the manufacturer to supply their needs. As a result as much as 78% of the prescriptions filled involve nothing more than the transferring of a drug from the manufacturer's container to the prescription container.

There are several reasons why products manufactured by pharmaceutical companies, particularly the specialties, have attained such importance. Probably the most outstanding are:

(1) effectiveness
(2) uniqueness
(3) patient acceptance
(4) uniformity

The pharmaceutical manufacturers have spent considerable time and money in the development of products with these advantages. Because the trend is very definitely toward the physician prescribing products manufactured by the pharmaceutical companies, and because much of the fundamental research now going on should lead to new and important specialties, it is worthwhile to consider the basic principles underlying the successful development and marketing of pharmaceutical specialties.

For the sake of clarity, we are considering pharmaceutical specialties as:

(1) new compounds shown to have therapeutic merit
(2) mixtures using new or old compounds and supplied in a form that offers unique clinical and/or patient advantages.

It was thought best to exclude from our discussion the highly competitive items which are added to

many manufacturers' catalogues to complete a line. Since these are products that have long been used and are marketed only for competitive purposes, it is not desirable to bring them in for discussion here.

It might also be worthwhile to explain that the development and marketing of biologicals have been omitted from this study because of the special research, production and marketing problems (facilities for development and manufacturing, refrigeration needed for storage, expiration dates, and so forth).

The development of new pharmaceutical specialties is not and can not be the sole responsibility of any one person or department within a company. Among the requisites for the successful functioning of a new products development program are the following:

(1) A far-sighted management that can set down a liberal policy and stick to its guns. Authority must be delegated to the individuals responsible, and decisions affecting the various department heads must be left up to them. In this manner, confidence is promoted and the will to make careful decisions is encouraged. The well coordinated management team is the first essential for continued progress in developing new and profitable pharmaceutical specialties.

(2) A research department organized and equipped to follow therapeutic trends, and to develop new specialties to fill clinical needs. The directing head of research must be a good administrator and leader of men, as well as having the necessary technical background.

(3) A production head who has a keen appreciation of the nature of pharmaceutical specialties and who has personnel and equipment to do his job efficiently and economically. He must be a good planner and exhibit the important quality of leadership among men.

(4) A sales department ably managed and alert to the needs of physicians.

(5) Advertising that shows imagination and is well integrated with selling.

It is our purpose in this monograph to restate and evaluate what in our experience and study have been sound and successful methods for the development and marketing of new ethical pharmaceutical specialties. We are not presenting any short-cuts to new product success, but we think it worthwhile to set down basic principles which if followed would insure a better record of performance than some have enjoyed heretofore. In any event, if our comments provoke constructive discussion and action then our efforts will have been well repaid.

Research And Its Importance

Research constitutes one of the most important aids in the development of ethical pharmaceutical specialties. In its broadest sense the term "research" refers to a method for systematically accumulating, correlating, and applying new knowledge. Since the research technique has been most widely applied in the fields of science, it is commonly believed that research is the creation of science and is limited in its applicability to such fields. Science has in fact "gone to town" with research and has demonstrated its possibilities. Accordingly, industrial research departments are generally organized chiefly for the purpose of carrying on scientific and technical research. However, it is well known that practically all phases of a business can be aided by data gained from analyses and studies conducted in accordance with research methods. Factual and interpretative surveys are frequently employed by enlightened management as a guide in reaching decisions on matters of broad policy. Fields offering good sales potentialities for new products are disclosed by market research studies. Methods for improving the performance of salesmen are often uncovered by sales research. The growing use of aptitude tests in the selection of personnel emphasizes another important application of the research technique. Production and control, commonly regarded as routine functions, rely upon research to insure replacement of obsolete equipment and manufacturing processes, and maintenance of product quality on the highest possible level. The variety of research activities is thus apparent.

Evidence to prove the need for research would seem superflous indeed today. Few will question that research is a paying investment. The pharmaceutical industry as well as others long ago recognized its importance in developing new products and improving the quality of and widening the field of applicability of existing products. Without the stimulus of new and improved products, sales—the lifeblood of industry—would rapidly dwindle. The past thirty-five years have seen the number of industrial research laboratories in this country increase from a few to more than 3,000.

Research not only benefits the companies which engage in it, but it also contributes to the welfare of the nation. This has been forcefully demonstrated by the dramatic termination of the War. Now with reconversion and its biggest problem, unemployment, facing the nation research will stand out as the one national resource of unlimited potentialities to aid in establishing and maintaining prosperity on a high level.

How Much To Spend For Research

A few years ago, Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, urged all U. S. companies to spend 2% of their gross income for research. At that time such a plan would have meant an annual expenditure by all industry of one billion dollars for product development and improvement—about five times as much as was actually being spent. Without doubt, many companies have been and will continue to spend more than 2% of their gross income for this purpose, but it is evident that many spend much less. The amount of income

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LOOKING INTO 1946

According to figures released by the U. S. Bureau of the Census the American nation passed the 140,000,000 population mark sometime during the late summer of 1945. This, on the basis of the 1944 per capita consumption of cosmetics, would imply sales for the American cosmetic and toilet goods industries of approximately $760,000,000. Actually, statistics assemsembled by this magazine show that this figure falls below reality. It stood at $783,000,000 by July of 1945 for the previous 12 months.

The average American consumer has managed to add another several cents to the cosmetic family-budget. The one billion dollars American cosmetic market that looked still rather remote by the beginning of 1945 is not so far away anymore at the start of 1946.

However, figures are of lesser importance at this time for the future of the American cosmetic industry than the economic and, even more so, social trends that call them into being.

What is behind that buying urge that has doubled cosmetic demand within the unbelievably short period of four years?

War influences certainly have been at work. However, their effect upon sales is frequently overestimated. Neither is the rise in family income a satisfactory explanation. There were other attractions to absorb "surplus" purchasing power. More logical and, if substantiated, more encouraging to cosmetic manufacturers, is the theory that fundamental changes have taken place in recent years in the consumers' attitude to the use of cosmetics.

If the assumption is correct, and there is much in its favor, cosmetic sales strategy may need revision. New groups, and heretofore neglected, call for increased attention, and 1946 will be the testing ground.

No one can dispute that the use of cosmetics has become an essential attribute to everyday living, part of our American civilization that has learned that good grooming is not a matter of "class" but a social necessity for everybody, young and old. Topping all is the realization that our growing span of life can have no meaning unless we remain young in appearance while adding new years to the conventional sixty and up.

As a matter of fact, the age curve of personal cosmetic consumption is undergoing a change. It starts at a higher level during baby-hood, shows less of its steep rise of previous years from twenty to thirty-five,

BLACK STAR

CHANGING CONSUMERS' ATTITUDES TOWARDS THE USE OF COSMETICS AND WAR-ENGENDERED INFLUENCES ARE AFFECTING COSMETIC CONSUMPTION. THE TREND OF THESE SOCIAL AND ECONOMIC FORCES ARE ANALYZED HERE IN THE LIGHT OF THIS RELATIONSHIP.

as the result, and does not drop as rapidly any more at the arrival of past-middle age.

In the absence of reliable statistics covering this most important subject it is difficult to estimate how far this flattening out process of the consumption curve has progressed during the war. Yet, even a casual study of store counters shows the growing influence of the very young, teen-agers and late fiftieths age-groups upon displays. Stores would hardly stock the articles bought by these customers unless they had a sufficiently large demand to justify the move.

In other words, it is highly probable that the recent rise in the consumption of cosmetics is not so much due to an increasing demand from persons who have been customers in the past, and can be expected to continue at their accustomed level, but rather to the accession of millions of new customers, plus such who because of age considerations had reduced their consumption but are now coming back with renewed strength.

Obviously there is much in favor of this argument. It is, certainly, hardly to be expected that even a large, but still only limited number of consumers, could have added suddenly to their already large consumption of cosmetics to the extent of doubling it at the rate of near $380,000,000, while, at the other hand, a comparatively small number of new or re-won customers would immediately raise the general level of per capita consumption by distributing the load over a larger quota of active consumers. Millions of men have acquired the habit of using cosmetics during the war and make now a heavy contribution to per capita consumption.

However, just counting noses merely touches only the surface of the growth problems of the cosmetic industry during the next and few following years. If mothers buy cosmetics for their offspring from the nursery up, if teen agers and men take more freely to cosmetics than in former years, or if the over middle-aged reacquire the zest for keeping up with the young, there are reasons other than statistical.

Changes in the income expectations may be the least of them and it is well worth remembering that employment has rapidly declined already since the end of 1944 and may continue to lower levels for another few months, until the upswing starts. Taxes will be less, though none at all for 12 million consumers, a tax saving of more than two and a half billions of dollars, approximately, for all.

Of what effect this will be upon the price and quality expectations of the average consumer can not be easily forseen. One of the outstanding characteristics of the American consumer is his conservative approach to budget making, selection of qualities and price levels. Having acquired the habit of using cosmetics for himself and family he is not likely to discontinue it even under the pressure of a declining income; especially where there is every prospect that declines will not be heavy and not extend over a long period. While more consumers have bought better cosmetics and, generally, at higher price levels during the war, upgrading has not been universal, to all appearance. The tendency has been to buy a larger variety, making cosmetics available for more members of the household.

Some adjustments will occur and must be guarded against. Consumers who had promoted themselves to buying in a higher type store may revert to their former sources. This will not be a matter just of shrinking purchasing power but, more often, convenience in shopping. "Fifth Avenue" in reach of the woman at work in the mid-town district may be highly inconvenient to the now-again-homemaker in Brooklyn or the suburbs.

Teen-agers are worth watching. They were the first to be discharged as war work declined and, with less income of their own, the five and ten counters may become more attractive, instead of the more glamorous, but higher priced, department and drug store counters.

The man customer has become definitely established as a factor in cosmetic consumption; but, 1946 must still show how deeply ingrained has become with him the habit. The fact that most of the newcomers among the numerous men's cosmetic lines are making a gift appeal rather than one of every day use, shows that cosmetic manufacturers are still suspicious of their luck. If the industry continues to rely on the woman customer as the leading purchaser of men's cosmetics, it may easily lose the support of the millions of men who during the war have brought their own "beauty aids." There is, in the field of men's cosmetics, a large, yet uncovered ground, that needs exploration, between the luxury lines and the run of the mill shaving and hair aids that were the backbone of the man's trade in prewar days. The question is, how far can the penetration into that vast male market be extended by utilizing the experience of the war-years? A start has been made by manufacturers of soaps with their new appeal to industrial and other workers. Yet, while everybody talks glibly about the new mass-market of the upper income earners of the industrial worker and the lower income groups of the white collar classes, we have still to discover the reaction of these customers to the appeal of medium priced men's cosmetic lines that, ultimately, must fill the still wide open gap between the mere necessity and the costly luxury article.

What will the several millions of women who have given up war work during the last several months do with their new leisure? Will they look for other employment, or will they re-enter the home and resume the management of their families?

If the theory is accepted that the inroads of industrial employment into personal appearance have been the main spring of the rapid growth of the consumption of protective and preserving beauty aids, their manufacturers are facing more than a readjustment of their market. Women who took to the use of cosmetics as a mere outgrowth of their war activities may only too quickly revert to pre-war habits of superficial cosmetic attention. If they should, they will not only reduce their own rate of consumption but influence also the purchasing habits of their families and, eventually, friends. Fortunately there is no evidence yet of such a development.

However, these millions of women who discovered cosmetics during the war as the result of their activities will need re-education in their use, during peace, in the home.

This problem is by no means as easy to solve as it may appear on the surface.

The surprising growth of the sale of protective cosmetics during the war years was only to a limited degree due to the promotional activities of the cosmetic industries. It had its real origin in the close association of millions of women, each faced by the same cosmetic handicap, spreading the remedy by word of mouth. War workers began to ask for protectives in drug and department stores long before cosmetic advertisers had caught up with the new market that took shape right in their front yard.

The mass suggestion that made that market is gone with the end of the war. Today the cosmetic industry does not face any more a solid block of women workers but a more diversified medley of customers with new interests and differently motivated.

This does not imply an immediate drop in the demand for many of the items for which women showed a decisive preference during the war. It means, however, that the springs from which this demand must originate in the future will not be the same as they were up 'til last summer. The cosmetic industry must find new motives and new supports to prevent a market, that during the war years moved in a solid front, from breaking up into a large number of unrelated groupings.

The re-establishment of the war-outmoded fashion appeal may be the solution. But the real significance of the 1946 woman customer of the cosmetic industry, probably, will be found in her regained and growing importance as the purchasing agent of the American family. It is there where she is likely to pile up most volume and where she may expect her largest influence upon the future prospects of the cosmetic markets.

Twenty-two millions of families are at stake. What these families buy, how they apportion their cosmetic budgets, what they select for the various members of their group can not be a matter of indifference for any manufacturer, large and small. From the nursery to adolescence the growing child is under the influence of the likes and dislikes of the family. Habits shaped now as the result of these influences are certain to carry until

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S. DE WITT CLOUGH

He Personifies Enlightened Leadership

THE remarkable growth of Abbott Laboratories has pleased its stockholders and opened the eyes of many within the drug industry. New and refreshing sales and advertising ideas coupled with top-flight research and enlightened leadership have more than doubled Abbott profits over the past five years. It is not without reason that able DeWitt Clough has pushed his company into the Big Five.

Last March at Chicago's swank Edgewater Beach Hotel friends and associates of S. (for Simeon) DeWitt Clough gathered to pay tribute to his forty years of service with Abbott Laboratories. Amid the flow of cocktails and sparkling Burgundy many of DeWitt Clough's friends thought back to the days when Abbott was just a modest business and the future chief executive was struggling as a $5.00 a week employee in the advertising department.

Abbott like so many other pharmaceutical firms was started some sixty years ago by a physician—Dr. Wallace Abbott. Dr. Abbott used his kitchen to separate the active principle from various herbs and plant bark. He found that his colleagues were willing to buy his products, so he thought that by advertising in the J.A.M.A. and writing sales letters to selected lists of physicians he could build a pharmaceutical business. The idea clicked and soon the business spread into its own quarters with the fancy name of Abbott Alkaloidal Company.

When World War I came along Abbott Alkaloidal was just beginning to get its head out of water. Old Dr. Abbott decided to hand over the direction of the company to able Dr. Alfred Burdick. It was Dr. Burdick who set Abbott on the path that has led to its success. He guided the company into what turned out to be the more profitable field of synthetic drugs. He negotiated the purchase of the Dermatological Research Laboratories, the Swan-Myers Company, and John T. Milliken & Company which gave the now named Abbott Laboratories several profitable specialities, a competitive line, and top-grade personnel.

While Abbott was going through its adolescent period, DeWitt Clough was serving as advertising manager and head of the company-owned medical publication, "Clinical Medicine." Both jobs were tough, especially the publication one. It was no easy task to take a journal, which was admittedly an Abbott house organ, and sell space to competing companies. Nevertheless young Clough was successful and the journal made money. Several years later, it was dropped and the present popular "What's New" launched.

As the company prospered it soon outgrew its Ravenswood, Chicago, Ill. quarters. A twenty-four acre tract of land was bought in North Chicago (an industrial suburb about forty miles from the Loop) and a series of one and two story units constructed. Today, some thirty buildings make up Abbott's production, research and administrative plant.

In 1933 DeWitt Clough was made president of Abbott, succeeding Dr. Burdick who died of pneumonia. The Clough administration has been one of new ideas and expansion. All agree that the great progress could not have been made without Mr. Clough's alert general headquarters staff. In the capable hands of advertising manager Charlie Downs, Abbott advertising became the talk of the industry and the medical profession. Able Vice-President Ray Horn has developed a strong sales policy executed by well-trained Abbott detail men. Smart Dr. E. H. Volwiler has headed up a

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TRENCH MOUTH

By M. A. LESSER

MANY people still remember the epidemic of trench mouth that appeared after the first World War. It is not surprising, therefore, that a similar outbreak was feared following the war just won. While no one can foresee the future, the indications are that this country will probably escape a widespread recurrence of this disease, provided, of course, that high standards of oral sanitation and general nutrition are maintained. Nonetheless, this infection remains a constant menace, one still responsible for much misery.

The term, "trench mouth" is derived from the fact that soldiers in the trenches of the first World War were particularly susceptible to this oral infection. Today, trench mouth remains the popular name for a disease generally known in medical and dental circles as Vincent's angina, Vincent's disease or Vincent's infection. A number of other, perhaps more scientifically exact names have been proposed and used, but the very number of proposed synonyms has led only to confusion.[1] Without getting too deeply involved, it may be said that Vincent's angina is a disease marked by pseudomembranous ulceration of the mouth and throat and characterized by the presence of large numbers of a spirillum and a fusiform bacillus.

Despite its quite modern name, trench mouth is a disease known for over 2,000 years.[2] Xenephon's army, which invaded Asia about 400 B.C., is said to have been afflicted with a mouth disease answering the classic description of Vincent's disease. In more modern times, Napoleon's army suffered a similar epidemic. It was not until the first World War, however, that the disease began to assume its present importance. One of the most common epidemics at that time among both the armed forces and civilians, trench mouth exacted a tremendous cost in manpower and production time. Since then, the infection has been endemic and at times epidemic throughout the world.[3]

The incidence of Vincent's infection in World War II has been lower than was expected, though a slight increase was noted in army personnel during the last year or so.[4] Although McCarthy's[5] studies seemed to indicate that this disorder was on the decrease, Hirschfeld[6] warned against taking false hope in the apparent decline in the incidence of acute Vincent's infection, since this is not necessarily an indication of a decrease predisposition to the disease generally. On the contrary, he remarks, close observation points to its increasing prevalence, though in a milder form. More recently, Craster[7] has felt it necessary to warn that trench mouth is a public health menace which has to be recognized by health authorities. No respecter of age, Vincent's disease appears to be most common in persons from 20 to 40 years old. It is generally agreed that the disease is approximately three times as frequent among men as among women.[2]

Whether or not the fusiform bacilli and spirilla associated with Vincent's angina are primary or secondary factors in the symptomatology of the disease remains a point of considerable argument.[2,8] As is the case with certain other organisms which become dangerous under suitable conditions, these bacilli and spirilla are among the normal flora of the mouth. When, however, the body's local and systemic defenses are lowered, these organisms multiply and do their damage. In the case of Vincent's angina, poor oral hygiene is probably the most important local factor contributing to the appearance of the disease.[9,10] Other local factors predisposing to the disease are a lowered tone of the mucous membrane accompanied by injury or a break in the continuity of its surface. Often these injuries are caused by tooth brush bristles, careless use of tooth picks or dental floss, particles of bone or foreign substances in food, irritation from salivary calculus, bad teeth, and ill-fitting dentures and bridges.[11] Excessive smoking, as well as drinking, are also contributing, irritating elements.

Systemic factors have also proved important in the etiology of trench mouth. Among these may be included malnutrition, vitamin deficiencies, lowered vitality caused by illness, and certain blood disorders. During recent years considerable attention has been given to the role played by vitamins, particularly vitamin C and certain of the B complex factors, like niacin.[9,10,12]

Adding to the confusion which appears to surround trench mouth is the variation in views concerning its mode of transmission. Contrary to older opinion, some modern writers claim that Vincent's infection is not contagious. This opinion seems to be borne out in the report of a special dental research commission.[8] In an apparent attempt to correlate these divergent views, Craster[7] has suggested that the disease may be more correctly described as transferable rather than infectious or contagious.

The prevalence of the disease and the fact that epidemics do occur demonstrated the fact that the disease is readily transferable, either directly or indirectly. Trench mouth may be transmitted in many

ways and among the more important means of spreading the disease there may be mentioned such factors as the use of dishes, drinking utensils and tableware previously infected, use of public drinking facilities by infected persons, kissing, employment of infected towels and the like, and the use of previously infected cigarettes, pipes and such.[10]

Trench mouth may start as a simple stomatitis or gingivitis, which, if untreated, goes on to an acute pyorrhea alveolaris with suppuration and ulcers, followed by gum recession, or the loosening of the teeth to such a degree as to interfere with mastication. This is accompanied by foul breath. Without proper therapy, Vincent's angina becomes a chronic disease accompanied by gastric disturbances, foul breath and loss of weight.[7]

Gingivitis is the most constant feature of the disease. The gums are exceedingly tender to the touch; becoming red and later showing a purple color. In the acute form of the disease, symptoms begin with fever, generalized aches and pains, restlessness and irritability, and the inability to eat. Shortly afterwards, red areas are noted throughout the mouth, especially on the gums, which later ulcerate. A foul odor is usually observed. As Pelner[13] has remarked, the patient looks and feels miserable. The intensity of symptoms will depend, of course, on the extent of the involvement. In rare instances, the disease may involve the inner surfaces of the cheeks, the tonsils and, occasionally, the tongue.[8]

As indicated by Francis,[14] it may be said that Vincent's infection assumes both an acute and chronic form and that the acute form if allowed to run its course becomes chronic and that the chronic form may become acute. Especially pertinent is his observation that a patient presenting either form requires nearly the same treatment and home care. Modern workers recognize that treatment of trench mouth must take into consideration both local and systemic factors and that no single plan of treatment can be regarded as suitable for all cases. According to Pfeiffer,[15] management should consist of three phases; namely, general treatment, establishment of correct oral hygiene, and local treatment, all carried out concurrently.

General treatment, he states, is directed toward elimination of systemic poisons and eradication of all systemic disturbances. To this end, alcohol, tobacco, spices and other highly seasoned and irritating foods are temporarily prohibited. Eating and drinking utensils, towels and other personal articles must be kept separate from those used by others and sterilized by boiling to prevent spread of the disease. The danger of kissing as a means of transmitting the disease must be stressed. Attention is also given to proper bowel elimination and, where necessary, an enema or saline cathartic is prescribed.

Considerable attention is focused on the need for a well-balanced diet rich in vitamins. Although the dietary factor and the role of vitamins in the etiology of Vincent's disease is questioned by some workers, there are many converts to the belief that avitaminoses plays an important part in the causes of this infection.[13] Although they feel that vitamins need further evaluation, Cox and Hodas[3] concede that a debilitating condition of the mouth and gums, such as is caused by a vitamin deficiency, may predispose to Vincent's angina. When such a condition is found to exist, they feel that the administration of adequate vitamins will undoubtedly shorten the duration of the disease.

At the other extreme, Jacobs[12] has said that there is sufficient clinical and investigative evidence that the majority of cases of Vincent's infection are primarily due to vitamin B complex and vitamin C deficiency. He believes that infection by Vincent's organisms and the signs and symptoms that follow are a secondary manifestation of a primary condition. Hence he stresses the value of large doses of vitamin C, niacinamide and riboflavin.

As a matter of fact it is quite general practice to instruct patients to drink citrus or tomato juice in order to provide adequate vitamin C intake. Often, supplemental vitamin C in the form of tablets is prescribed as an integral part of treatment.[16, 17] In severe cases, Albray[11] also advises the use of fish liver oil capsules, rich in vitamins A and D.

Much interest has swung in the direction of nicotinic acid or niacin in the treatment of trench mouth. In 1940, King[18] called attention to the possibility of an association between pellagra and Vincent's disease. In

Abbott Collection of Army Medical Paintings

his hands, nicotinic acid was successfully used in the treatment of several cases. Others[19] have also reported beneficial results from the administration of this vitamin B complex factor. Johnson[20] found that the most spectacular results with niacin administration were obtained in acute cases. However, other investigators[21] were not able to find any relationship between nicotinic acid deficiency and Vincent's disease.

Establishing adequate oral hygiene is also a major factor in speeding recovery in patients with trench mouth. Since some authorities[8] feel that oral sepsis is the most important predisposing local condition, mouth sanitation is considered to be of first importance in treating the disease. Being a painful disease, especially in its more advanced stages, there is a tendency on the part of sufferers to brush their teeth indifferently or not at all. The result is increased oral sepsis plus heightening of symptoms. Adequate therapy in this phase of treatment consists mainly of thorough scaling of the teeth and frequent mouth irrigations to eliminate stagnant oral secretions and accumulated debris. Mouth washes are prescribed for home use; products containing oxidizing agents being most generally used.

The local therapy of Vincent's angina has called into use a great variety of drugs and chemicals, many of which have been discarded by modern therapists. Since no one drug has been uniformly successful, quite a number of local agents still find use in treating the disease. These include oxidizing agents, spirocheticides, germicides and, more recently, sulfonamides and penicillin. Francis[14] stresses, however, that in order for any drug to exert its action on vital tissue, the field must be cleared of debris and accumulations, which act as barriers, help maintain anaerobic conditions and prevent penetration of the medication into the hidden pockets where the viable and virulent organisms are located.

Many drugs and chemicals with caustic and escharotic action have been advocated for use in treating Vincent's disease, including phenol, trichloracetic acid, chronic acid, copper sulfate, zinc chloride, iodine, mercuric chloride and silver nitrate.[22, 23] Of these, chronic acid appears to stand out as the drug most frequently used and recommended.[10, 12, 14, 15] A powerful caustic and oxidizing agent, chromic acid, in strengths ranging from 5 to 10 per cent, is applied topically to relieve pain and to assist in removing necrotic tissue.[24] Requiring careful technic, the application of chromic acid is usually followed almost immediately by a spray or rinse of hydrogen peroxide solution.

Since the organisms held responsible for trench mouth are classed as anaerobes, the use of oxidizing agents plays an important part in treatment. Agents like chloramine, hydrogen peroxide, hypochlorites, potassium permanganate and sodium perborate have proved useful for both clinical use and home self-treatment. Pastes based on sodium perborate[10, 23] and of zinc peroxide[13, 25] have been suggested as efficacious when used by dentists.

Mouth washes for home use have a major role in treating trench mouth in conjunction with office or clinical therapy. Solution of hydrogen peroxide, U.S.P., diluted with from two to four parts of warm water, is one of the most widely recommended mouth rinses for home use. While the dangers of chemical burns from or sensitivity to sodium perborate are appreciated,[6, 23] sodium perborate is quite frequently advocated for use in making home treatment mouth washes. Generally employed in the proportions of one teaspoonful in a glass of warm water, the powder is readily flavored to produce a more pleasing product. Illustrative is the following simple preparation to be used in the same way as plain perborate:[1]

Sodium perborate	**60.00 Gm.**
Saccharin	**0.09 Gm.**
Oil of wintergreen	**1.20 cc.**

Where a somewhat more rounded perborate powder for making a rinse in cases of Vincent's angina is desired, the following preparation may be used; one teaspoonful being added to eight ounces of warm water to make an hourly rinse:

Sodium perborate	**60.0 parts**
Sodium bicarbonate	**30.0 "**
Methyl salicylate	**2.0 "**

If desired 30 parts of sodium chloride may be substituted for the bicarbonate or the salt may be added to the above.

More elaborate and used in the same way is a perborate powder listed by Burlage[1] as containing:

Sodium perborate	**120.00 Gm.**
Sodium oleate (neutral)	**120.00 Gm.**
Saccharin	**0.05 Gm.**
Oil of orange	**0.30 cc.**
Oil of wintergreen	**1.20 cc.**
Oil of peppermint	**0.60 cc.**
Oil of rose	**0.20 cc.**

Though not much used in American practice, British workers[26] class potassium chlorate as a beneficial and useful agent for treating Vincent's infection. A non-staining, non-irritating, inexpensive powder containing this oxidizing agent is described[27] as containing:

Sodium bicarbonate	**6.0 parts**
Magnesium carbonate (smooth)	**1.5 "**
Sodium chloride	**1.0 part**
Potassium chlorate	**1.0 "**

Coloring and flavoring agents can be added, if desired. Used in severe cases of ulceration, the powder is applied by means of wet cotton, to be substituted by a tooth brush as the condition improves.

Spirocheticides are often employed in treating Vincent's disease, especially in cases where oxidizing agents have been ineffective. Arsenicals are quite extensively used, both locally and by injection. The organic compounds, arsphenamine and neoarsphenamine, as well as the inorganic potassium arsenite are quite standard

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PRIVATE BRANDS?

ONE day last week three retailers, a department store buyer, the head of a medium size mid-west drug chain and the head of a chain of children's wear dropped in our office. All were seeking the same thing—were conditions right for them to bring out their own brand, could they get bottles, boxes, and other things they would need.

Retailers are again beginning to think of their own brands in a way that may equal the own brand epidemic which followed the last war and which brought forth such a deluge of printed and spoken eloquence.

Many of us can remember convention oratory, proving beyond doubt that substitution in a retail store was a heinous sin, that if a dealer only understood the wonders and mathematics of turnover he could forget everything else. Or the retailer who thought he had discovered in his private label either a club to use on national advertisers or an easy path to fortune.

As usual, after the storm and the fury, certain retailers discovered that they could promote their own brand profitably, but within much narrower limits than they had expected or hoped for. Many others found it more profitable completely to abandon a brand of their own. Things settled down very comfortably for both sides.

But now a flourishing market, the stores filled with many new buyers not very brand-conscious but with plenty of money, the shelves filled with many packages which retailers know only too well are riding this wave, has again aroused hopes in many retail breasts that they too, with their own liberal profit brand, can get a big chunk of this business in their own store.

There are several questions a retailer should ask himself before commiting his store to a store-owned private label line. The size and kind of traffic enjoyed by his store is a major factor. Is the traffic transient or has the store a clientele which trades regularly with it? Particularly is this clientele, because of fashion leadership or some other quality of the store, as much under the influence of store prestige as that of any national advertising? Further, is the store willing to put as much time and creative effort continually behind their own line, as any one manufacturer whose line is featured in their department. Obviously, since they are either putting their own name on these products, or at least are featuring them prominently and putting a major effort behind them, any lack of quality or package, any failure continually to keep pace with other manufacturers in their department, will eventually reflect on the store. The public,

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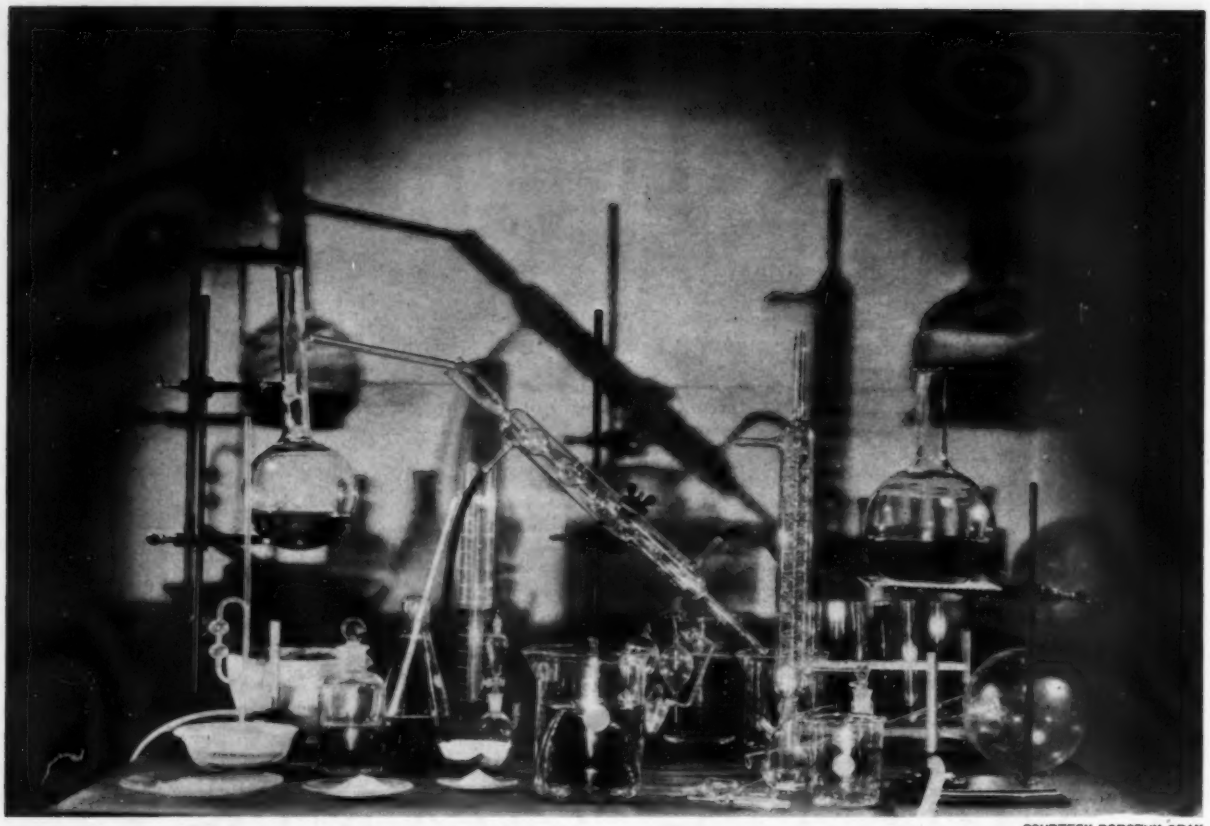

COURTESY DOROTHY GRAY

Defects in Toiletries and Suggestions for Correction

By Dr. E. G. THOMSSEN, Consulting Chemist

THERE is nothing more discouraging to the producer of cosmetics, than having an item become defective in the user's hands, on a dealer's shelf or in stock. This condition results in consumer and dealer ill will, reduced sales, lack of confidence in or hesitancy to produce, and last but not least frayed tempers often resulting in recriminations against those in charge of production. Spoiled products have the habit of appearing in the least expected places for apparently no good reason whatsoever. Some complaints usually accompany the condition and goods may be returned, but the disastrous result is that in many cases they fall into users' hands who become resentful, conclude they have been imposed upon or defrauded and stop using the defective brands bearing the maker's name. In most cases they do not make their complaints to the manufacturer or dealer and give him an opportunity to correct the matter, but broadcast their ill feeling to friends and acquaintances so as to spread the story even wider. It is a pretty difficult problem to estimate the harm that may be suffered by a business through defective products being put on the market. Years of effort are at times rendered ineffective by such conditions.

Cosmetics consist of powders, liquids, pastes, creams and compact solids. While some of these are more susceptible to spoilage than others, it is a mistake to assume that as simple a product as a powder, for example, cannot go bad and cause difficulty. Deterioration of toiletries may strike in the least expected places

unless constant vigil, precautionary care, and more than ordinary imagination are pursued in production.

Defects may be caused by physical changes or by chemical changes. Physical imperfections are usually due to atmospheric conditions, like changes in temperature, humidity or light. Chemical changes are caused by incompatibilities, oxidation, impurities and by bacterial or fungicidal action. Blemishes due to physical action are such changes as separation, hardening, grittiness, color fading, shrinkage and consistency changes. Off odor, darkening of color, liquefication, as well as some of the defects similar in character to those due to the physical changes are caused by chemical reaction.

In order to focus our attention clearly upon specific defects and make suggestions as to their prevention and correction, we will consider the toiletries under the forms in which they are produced, i.e., solids, liquids, creams and pastes.

Under solids we include powders and compact solids. While powders are not very prone to defects, there are certain imperfections appearing in them from time to time. Some of these are caking, grittiness, improper distribution of color, darkening or fading of color and loss of perfume value. The correction of these requires a rather careful determination of what the reason for the defect is.

Caking is usually due to changes in the moisture content. Water may be either increased or lost. Under the influence of heat it is possible also to form or to lose water of crystallization, thereby changing the composition of certain chemicals. Then again most substances will not react chemically until water is present. These substances then may be compatible when dry but unstable as moisture is taken up from the surrounding atmosphere. Inert substances have the power to absorb moisture rapidly and cake as a result of this. When caking appears as a defect, it is very important that the action of moisture be given prime attention.

In the case of compact solids, crumbling or cracking of which is the usual defect with these preparations, we have a condition appearing which is just the opposite of that just considered. Here the water or moisture content again may be the cause. This is especially true when the product is subjected to cold, below freezing temperatures after having stood in a humid place. The internal stress caused by expansion and contraction due to water or other liquid content in such toiletries often causes cracks and crumbling. Then, too, if moisture is introduced it is very apt to dilute and weaken the binding agent that has been used to hold the cake together. Chemical reaction produced by increased water content is also possible. In the case of compacts and rouges, where breakage often appears it may be due to improper granulation of the mass, uneven pressure of the tableting press or insufficient powder in the die of the press. Deterioration of the binding agent is again a possibility. When compacted toiletries made from powders crack or crumble then these conditions should be carefully studied.

Grittiness is usually due to breaks in the sifting cloth, due to improper air separation or not grinding the materials finely enough. It is also known, as just indicated, that if certain substances take up water to crystallize, they are apt to become grainy or crystalline. (Improper color distribution—in powders or compacts—is due to poor mixing . An efficient mixer, followed by micronizing, or passing through a disintegrating mill will correct this condition.) Changes in color usually indicate chemical reactions. These may be due to using an improper dyestuff, under acid or alkaline conditions, precipitation of the dye due to some substance with strong oxidation or reducing action, using a color that is not fast to light, oxidation of an unstable, usually unsaturated perfume material or using two perfumes which interact, bacterial or fungicidal action, using an unstable product in the composition and reaction of the toiletry with impurities or possibly metals quite often introduced by reaction with the packaging material. Sometimes the reason is beyond even these conditions. A case in point was a white powder of rather high starch content that suddenly took on green spots in a few weeks after being packaged in a glassine lined canister. These spots looked exactly like mold to the naked eye and grew like this organism. It naturally was assumed to be mold. When a preservative did not correct the condition, further investigations were made and it was found to be due to an entirely different reason. The can manufacturer before applying the labels used a green ink to mark the tops of the cans. This mark was covered by the label and indiscernible when applied. Part of the ink, however, during their application scuffed off in microscopic specks which very slowly spread through the contents when the package was filled and caused the green, mold-like spots. The point here is that packages as well as contents should always be investigated thoroughly when blemishes appear in any product.

Loss of perfume is quite common and the reasons therefor are not difficult to find. Their disappearance is due either to evaporation or decomposition. In the former case it is necessary to consider the fixation of the odor by the use of proper perfume materials and by using an ingredient which will properly absorb the aromatics and hold them properly. In the case of decomposition it is necessary to use a combination of odors that are stable against oxidation and compatible with the ingredients in the cosmetic preparation. Unless proper attention is given to the technical phases of perfuming, not only solid toiletries but other types of odor appeal in other toiletries, which is so important, may turn out disastrously.

Liquid toiletries generally consist of clear solutions, emulsions, colloidal solutions, and solids suspended in liquids. All types are subject to deterioration in various degrees. Clear liquids frequently cloud or form sedimentation or an unsightly floater. Emulsions break, curdle and separate into two layers. Colloidal solutions often become thinner in consistency or separate into a

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Patents and Pharmaceuticals

By THEODORE G. KLUMPP, M.D.*

FOR SOME years there has been an expression of dissatisfaction with certain aspects of our patent system. There has been a feeling that our patent laws have not kept pace with the ever increasing complexities of our modern industrial civilization and that some corporations were exploiting the patent laws to stake out for themselves monopolies and unfair competitive advantages contrary to the intent of the patent laws, the anti-trust laws and the public interest. Seeing which way the wind was blowing, certain individuals with nothing at stake and a reputation to be gained have gone overboard in condemning our patent laws. In any group of human beings there are always those who are willing to scuttle the ship because there is a rat aboard. Before opening the sea cocks let us take a look at the fundamentals of the patent system.

There are certain erroneous notions that many people entertain about patents. A patent does not give the patentee the right to work the invention or to sell it. He could do that without any patent. All the patent does is to provide an incentive to invent, by giving the patentee the sole right to practice the invention for seventeen years. The condition is that the invention must be new and useful, and the patentee must describe it so that anyone can practice it when the limited time expires. A patent gives the inventor a head start in a competitive race with respect to his novel contribution to knowledge, so that he may profit from what he has given to the world. This does not hurt anybody because the inventor has brought something new into the world, and if it had not been for him no one would have had it at all. It doesn't take anything away from the public because without the invention the public would not have had it at all.

We say that Morse invented the telegraph. There was no telegraph before. Edison invented the electric lamp. There was none before. Bell invented the telephone. There was no telephone before Bell. So to give these men patents did not take away from other people anything that they had. Nobody had these things before these men thought them up.

An idea is property. But when it is put into practice it is property that is difficult to protect. Therefore, there are special laws to protect this form of property. When an idea concerns something that is new and useful to humanity, the patent laws provide that the inventor may enjoy the property rights inherent in his idea for 17 years, provided that he describes his idea in such a way that it becomes public property when the time expires. And so patents are property for a limited time.

It has become fashionable in certain quarters to call them privileges and monopolies, because some people do not like patents and it suits their purpose to apply an ugly word to them. But these folks forget that all property is monopoly. Property is merely the right to exclude. If I own a watch, it belongs to me in the sense that if anyone tries to take it away from me, the law will protect me. I own a house, and the law permits me to keep uninvited people out of it.

These generalizations serve to point out something that is going on in this country. There are certain equalitarians who object to the concept of private

*President, Winthrop Chemical Co.

property. They are the "share the wealth" people. They want to share the property other people own instead of treating new property. This is a static not a dynamic philosophy. It is negative. These people object to patents particularly. They apply the offensive epithet "monopoly" to them and would like to see the whole system destroyed. The insidious attack now being made on the patent system is called compulsory licensing, that is to say that anyone who wants to share the patentee's property can do so. This is as logical as to say that anyone who wants to share my house or my suit of clothes is entitled to do so, against my will. The whole theory of the compulsory license is an attack on intellectual property. It is no answer to say that the property has been abused by some people. Maybe it has been in some instances. Any property can be abused. A man may put up a slaughter house on property he owns in a residential district. So we have zoning laws. Men may make contracts that restrain trade. So we have anti-trust laws. There are careless drivers of automobiles who run people down in the public streets. So we have speed laws and traffic regulations. We do not prohibit the manufacture of automobiles. The remedy is to stop the abuse—not to destroy the property. If patents are misused, laws could easily be drafted to stop the misuse, if present laws are not enough. If property is abused, legislation should be directed at the abuse, not at the property.

Any form of compulsory licensing of patents, however plausibly it may be presented, is an attack on the integrity of property, and property of a kind which most deserves encouragement, the property that a man himself creates out of his own thoughts, his own research, and his own ideas, and which, but for him, would not exist.

I am in sympathy with some of the proposed changes in our patent laws; for instance, proposals to reduce the time lag between a patent application and its issuance, compulsory licensing of unused patents, and steps to raise the standard of patentability. But suggestions are again being seriously entertained in Washington to apply special limitations to patents in fields related to public health and that includes primarily drugs. These suggestions come with a new coat of paint, but they are the same old proposals that have been repeatedly advanced and rejected almost since the inauguration of our patent system.

The purpose of these proposals is to make articles that are essential to health and life available to the public at a more reasonable price. If these patent proposals will accomplish this purpose without at the same time retarding the development of new inventions there can be no quarrel with them. But let us look at this proposition carefully and see whether it will bring benefit to the public from a long range viewpoint or whether it is merely another proposal to kill the goose that lays the golden eggs of progress.

Under our present American system, the development of industrial invention has outstripped that of every other nation to such an extent that there is really no close competitor. The provisions we made for the health and safety of our troops and the care given to our wounded astounded the world. Untold thousands of our troops are back with their families or on their way home who would be lying buried in some distant spot except for the skill of our doctors and the resourcefulness of our pharmaceutical industry. The test of war has proved our present American system of free enterprise superior to that of any other nation on the face of the earth. Let us be very certain of what we are doing before we adopt fundamental changes in the rules under which that system has operated so successfully and particularly when the proposed changes are merely steps in the direction of other social philosophies that have not yet shown themselves able to produce results equal to our own.

A system of compuldory licenses will in my opinion retard rather than stimulate progress in the field of pharmaceuticals. Let us consider an example. When prontosil was introduced into this country it was an original patented product owned by one concern. Immediately the chemists of all the other concerns set to work to find something to duplicate or surpass prontosil. The result was an array of sulfa drugs all of which afforded keen competition to the original prontosil. If the other drug houses could have contented themselves with licenses to manufacture and market prontosil, do you think they would have been equally zealous to spend millions for research to find substitutes for prontosil. I seriously doubt it. The same is true with respect to other potent drugs. The minute one concern introduces a new patented product that is commercially successful, it serves as a powerful stimulus to chemists of other concerns to find something equal or better, and they usually succeed. This is not only a leaven to invention but a potent stimulus to competition as well. Compulsory licenses on the other hand lay a dead hand on invention. Instead of spending millions for research it will be cheaper to wait until someone else does the inventing and apply for a license. Besides the money can be spent to more certain advantage by advertising and detailing more heavily the products one already has.

The charge has been made that the price of exclusively patented drugs is higher than the price of those generally available. This is undoubtedly true in some instances but there are mitigating factors which are not generally considered by those who find this a serious objection to the prevailing patent system. In the first place there is no consistent correlation between high price levels and patents. The laws of economics apply to patented articles as well as others and most manufacturers don't need to be taught that they can make a greater total profit by selling more units at a reasonable price than by holding the price where many cannot afford to buy a drug. The record of the industry in reducing prices of patented drugs to levels where the public can afford to buy

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Again in 1946

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Isabel La Catolica 45, Desp. 420
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Mexico, D. F.

Dr. Blem & Cia. Ltda.
Post Box 2222
Rio de Janeiro, Brazil

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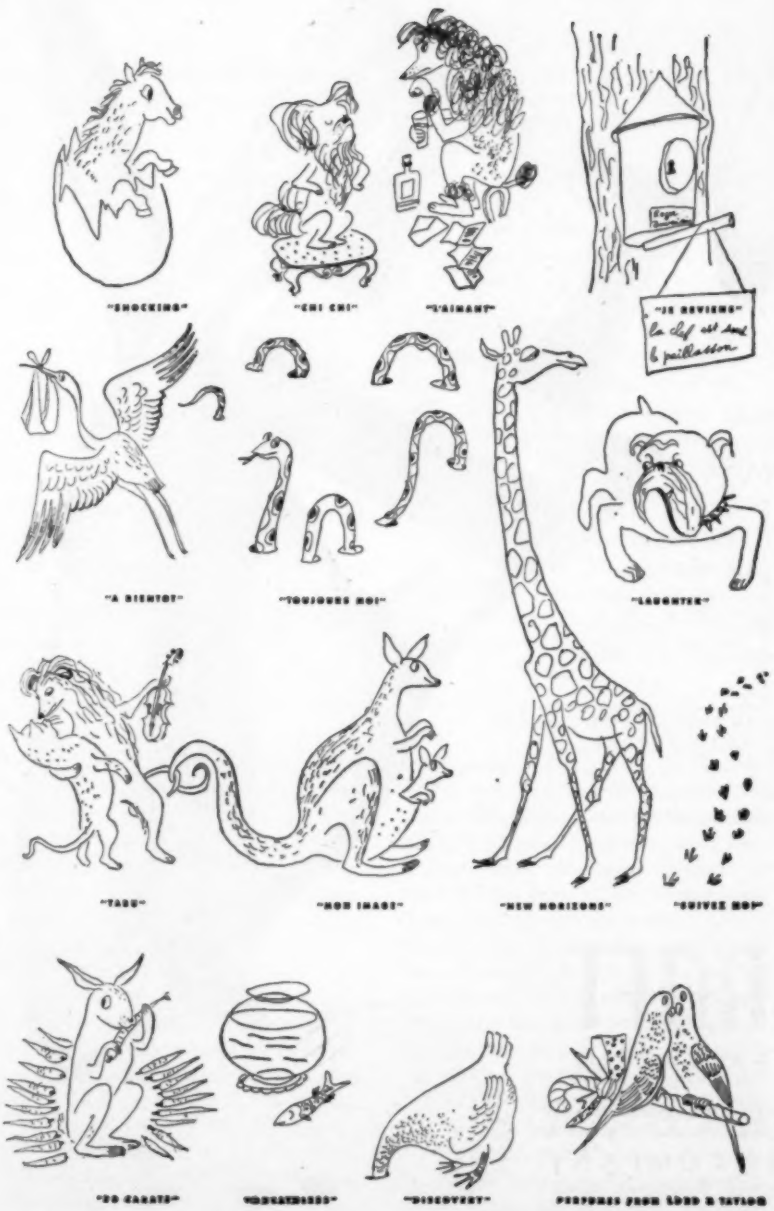


Perfume Advertising

By this time Christmas is just something the cosmetic industry has to begin thinking about in a month or so, but we can't let Christmas 1945 become history without some reference to the Lord & Taylor perfume advertising which appeared during the pre-Christmas shopping season. It came as a welcome breath of fresh air in an atmosphere grown dank and stale with over-glamorized and over-sexed perfume copy. It established once more the fact that Lord & Taylor newspaper advertising is without a peer for smartness-originality, and courage to break with the traditional.

Of course the immediate reaction is—Does it sell perfume? Well, we think it does and what is more important, from the Lord & Taylor point of view is that it sells Lord & Taylor. The advertisement is reprinted nearby and you can be your own judge, but we think there is no question of its appeal "to the people that other people copy." It may be criticized for its lack of appeal for the mass mind but those who, by their reactions, can make a successful play or a successful book, a successful style or a successful perfume, welcomed it with cheers for its fresh and amusing approach.

It was doubly welcome at this time because there seems to be a trend, especially among some of the more recent arrivals on the scene, to become increasingly sexual and erotic in their choice of names and in the treatment of their advertising. Manufacturers of this ilk would apparently like to call their creations Adultery or some reasonable facsimile, with advertising art and copy to match. Thwarted in this direct approach they play a none too subtle game of coming as close as they can

Reveling . . .

in Revealing Beauty

Sensitive to the immediate market that yearns for chic and gaiety after the austere years just past, WARNER-CRAFTSMEN are equipped to dress your merchandise in a chrysalis of charm.

Linked to a forceful creative staff are our artisans, who translate the idea into reality . . . into an original WARNERCRAFT product . . . that tantalizes the roving eye and is irresistible to acquisitive fingers.

Sales are what you are entitled to expect in merchandise . . . when the package is by WARNERCRAFT.

Let a WARNERCRAFT designer be your assistant in remodeling old containers and conceiving new ones for this postwar public.

WARNERCRAFT

"THE FINEST WORD IN PACKAGING"

Makers of set-up and folding boxes of all types, transparent acetate containers, hand made specialties, counter displays and dispensers.

THE WARNER BROTHERS COMPANY

Main Office and Factory: 325 Lafayette Street, Bridgeport, Conn.
New York Sales Office: 200 Madison Avenue, New York, N. Y.

Packaging Forum

By Josephine von Miklos

Like a wave, almost coming from nowhere and gathering momentum as it approaches land, is the creation of cosmetics for youngsters. There were a few pioneers in this field some years ago but they didn't have the benefit of proper timing. Today we have an impos'ng array of these lines and it seems more are coming.

Whatever the answer, here we are with a good number of nice lines for nice young people and we can now sit back awhile and analyze the elements that go into the designing of merchandise that appeals to the young market. Here comes to the fore however a point which makes the whole business of designing this type of line, somewhat tricky. For they do not only appeal to youngsters, or rather, have to appeal to them, but also to their mothers, and when shall the twain meet? Mother thinks of her darling as a girlish blossom and dosen't really like to see the delicate lips smeared with the deep dark shades of sophistication. Daughter, at the age of fourteen is anxious to look like thirty. Labels and containers, to please the mother, should be fluffy, charming, flowery, light and airy, expressing in color and decoration her idea of whimsical youth. But Joan and Louise and Betty are all but flowery, airy and whimsical. Most of them stand their ground firmly and have their very own and very definite ideas of chic. The machine age and the age of war have made them trim, and maybe a little hard. Still, we the designers, cosmeticians and merchandisers have to walk the tight rope between those two ideas of what is suitable for and appealing to the youngsters.

To make a complicated thing simple: there are a few basic elements with which we can not go wrong. Simplicity is one of them. Simplicity means elegance no matter what the age, and, no matter what the market, ease of operations. Good color is another factor. By good color we mean suitable color, and it is not necessarily all pastel in this case, because gay and bright colors are coming back into our lives all around us, psychologically and otherwise, and in clothes, home decor and accessories we will more and more deviate from the staid and classic black and navy blue, or apple green walls, or, for that matter, pink and light blues. Strong accents are in the coming, and gaiety is, we hope, around the corner. As to the decoration of our labels, containers and boxes, we might as well remember that little girls do not necessarily like cats. They like things that look grown up and want their dressing tables definitely on the elegant side. They are beginning to be interested in the arts, in sports, in amusement. A classic design will appeal to them, because it is usually sophisticated in its severity. This, with a touch of modern strength and good balance of color and contrast can be almost amusing and certainly rendered with that feeling for elegance which the youngsters believe is their birthright.

without offending the Post Office or the good taste which still persists among the great masses of people. They still can't understand and as yet haven't learned that good taste and successful perfume selling are not necessarily incompatible.

Time-Life-Fortune Muffs Men's Cosmetics

If Time-Life-Fortune is going to continue to pontificate upon the subject of cosmetics, it would be helpful if it would drop the pose of superior and almost hysterical amusement to toss in a few facts once in a while. And when they do throw in a few figures, it would be more confidence-inspiring if their figures would (a) approximate the facts and (b) approximate each other. In the November 19 issue of Time, for example, the statement was made that "the handful of men's toiletries companies has grown to over 100, with a gross business of $50,000,000 a year." The January issue of Fortune, on the other hand, put it this way. "U. S. males who titter at the ladies for spending over half a million a year for beauty aids will find chill comfort in the fact that some $40 million was spent last year for men's cosmetics."

Now, if we give the Luce-sheets all the breaks and forget that the Time-fact indicates $50 million at wholesale and the Fortune-fact $40 million at retail, and assume that they both mean retail, they're still far from the truth. Fortune, as usual, is so sure of itself that it arrives at this figure after excluding from it "routine shaving materials." We're not sure just what "routine shaving materials" are but if we assume that they include all shaving soaps and all soapless shaving creams, however packaged, (a $66 million retail market in 1945) then we would say that $20 million retail is a generous estimate of the "for-men-only perfumes, skin-conditioning creams and bubble baths," referred to by Fortune. We also exclude the hair dressing market which also was measured in a good many millions of dollars long before Time and Fortune turned their heavy thinkers loose on cosmetics.

As a matter of fact, the whole Time-Fortune attitude that cosmetics for men is a war-time development and that old-line cosmetic companies are not in there slugging because they consider it a war baby, is based upon an unsound premise. It cannot be denied that the war furnished a certain impetus, but the market was booming right along many years before PX and G.I. gift purchases were heard of. As far back as 1940 Shulton was doing $1,500,000 in Early American men's cosmetics and today is far outstripping in dollar volume the names which Time-Fortune touts so highly. There would probably be fewer new names and certainly be more old-line names in the market today were it not for the fact that tight material supplies combined with a record-breaking demand to keep old-line companies fully occupied turning out what they already had. Men's lines, teen-age lines and baby lines, had in most cases to be put aside for post-war exploitation so that the new names in all these fields had nothing like the competition they might have had and still may have before the full story is told.

If the Luce-sheets do no better with national and world affairs than they do with cosmetics, it's time their pompous pretentions were challenged. For on their record in men's cosmetics they boldly mouth unsound opinions based upon sloppy facts.

Trade-Marks

We recommend as required reading the following remarks by Hugo Mock, counsel, Toilet Goods Association, reprinted from that association's bulletin 925. It is at once the simplest and clearest explanation of trade-marks we have ever seen and it would be extremely helpful if every executive in this industry were to commit it to memory. Mr. Mock writes, "There is at the present

time, an unusual activity in the toilet goods industry in the adoption of new trade names for perfumes, cosmetics for men, and other new products and the industry finds it increasingly difficult to find trade names which are new, which are attractive, and which can be legally protected and owned exclusively by the user thereof.

"For these reasons, it may be desirable to repeat to members of the industry some of the basic facts about trade-marks and their protection in the United States:

"1. The ownership of trade-marks in the United States still depends primarily upon their use and only secondarily upon their registration. Ownership of a mark begins with the bona fide use of said mark in commerce and there is no ownership in any trade-mark apart from such use. The originator of a new trade-mark does not acquire any ownership in same by priority of invention as in a patent, and the courts will uniformly accord a trade-mark, not to the first person to think of and to claim the same, but to the first user of the mark in association with the sale of merchandise.

"2. Although interstate sales on trade-marked articles are necessary before registration is allowed in the Patent Office, the test of priority is any sale in commerce, whether intrastate or interstate.

"3. Very often the remark is heard that ordinary words in the English language can not be registered as a trade-mark. This is a misconception. There is no rule against the registration of ordinary words as trade-marks, but generally geographical and descriptive terms are unregisterable. Obviously "Rose" Brand would be unregisterable for perfumes but would be a good trade-mark for millinery or stationery.

"4. Even descriptive and geographical terms can be registered as trade-marks under the Act of March 19, 1920 where the user has had exclusive use of same for more than one year. For instance, words such as "Oklahoma" or "Arizona" are clearly geographical terms but if no one has competed with the originator of "OKLAHOMA" perfumes for one year, the user of that mark could secure a limited registration under the Act of March 19, 1920.

"5. Is registration necessary to secure ownership in a trade-mark in the United States? Generally speaking, no, as thousands of marks are in use in the United States which have never been registered.

"6. If registration is not a prerequisite of ownership what then are the advantages of trade-mark registration? Registration confers in the case of registrations under the Act of Feb. 20, 1905, prima facie ownership and is an indicium that the mark is a technical trade-mark and therefore capable of monopolization. Furthermore, registration in the United States Patent Office gives Federal jurisdiction automatically if the mark is infringed and also affects the question of damages. Marks registered in the United States Patent Office may be deposited with various customs offices and goods bearing infringing marks will be automatically refused entry into the United States where such marks have been deposited with the various collectors of customs. It is to the advantage of industry also that there be some central bureau of reference where it can be ascertained whether a particular mark has been used and up to this time the Patent Office is the only single reference bureau which can be considered for such a purpose.

"7. The Toilet Goods Association has published in the past a list of "Trade-Marks and Perfumes, Toilet Preparations and Soaps," a work of more than 800 pages which appeared in 1936 and a supplement of 130 pages which appeared in 1940. Since no trade-marks adopted or originated since 1940 are in either of these publications, it is necessary to supplement any inquiries as to new trade-marks by searches in the Patent Office from 1940 to date. The Toilet Goods Association is endeavoring also to keep a record of all marks published to date or submitted by members of the industry.

"8. Suppose the searches mentioned in paragraph 7 have been made. Is it still possible to have undiscovered uses of trade-marks in the United States which would interfere with trade-marks legitimately adopted by subsequent users? Unfortunately, the answer to this question is "yes." Since under the present trade-mark laws registration is not obligatory it is still possible from time to time to encounter marks which have been used in a small way or possibly not registered to embarrass subsequent claimants. Until corrective legislation is passed it is still not possible to insure priority of adoption and use of a trade-mark in the United States. Typical of such corrective legislation is the Lanham Bill, now pending in Congress.

"9. Can a trade-mark be registered otherwise than in the United States Patent Office? Yes. Trade-marks may be separately registered in the various states of the United States, but in general, such registration is not recommended. State registrations are no proof of priority and in general all state ap-

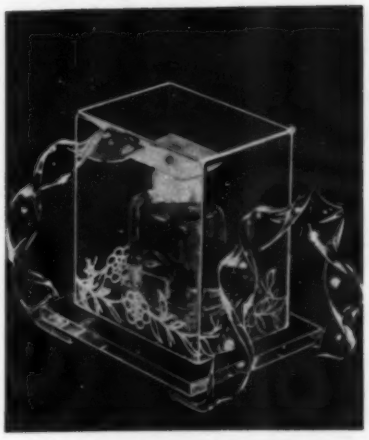
The Cosmetic Trend

The ready reception which men's clothing and outfitting stores have accorded to men's cosmetics, including one of the leading men's hat chains, draws attention to the fact that there is still much to do for the cosmetic industry in opening up new fields of distribution.

What makes this development of special interest to the cosmetic industry is that it opens the door for the sale of luxury lines of cosmetics through novel outlets and with less of the competition that they must meet at the drug or department store counters. The majority of the men's outfitting stores which have introduced men's cosmetics of late are following the practice of concentrating upon one line. This also is the case with many of the smaller women's specialty stores where dress and other women's wear manufacturers have educated their customers for years in the advantage of handling "exclusive" lines, obtainable through one store only in one city or, at least, neighborhood.

This may not suit the manufacturer who looks for volume obtained through large scale advertising. It has its appeal, however, to the manufacturer of a specialized line who must rely upon intelligent counter support and the backing of a store that knows that customers will return because the item is not obtainable through the more ordinary outlets.

However, methods of selling and developing this business are secondary to the fact itself that thousands of retail outlets, which have not carried cosmetics in any form before, are getting acquainted with their income potentialities and that the step from handling one specialized group of items to the sale of a complete line will come quickly, once a beginning is made.



Sample of perfume package, custom-fabricated in transparent lucite by F. J. Nussbaum Co. Available in a variety of finish and decoration.

plications for registration are allowed if proper in form, as the individual states have no machinery for investigating priority and are not guided by rules of registration of long standing such as guide the United States Patent Office. It is only in isolated cases that state registration of trade-marks are desirable. Registrations in the United States Patent Office are normally for a period of twenty years and are renewable before expiration. Registrations under the Act of March 19, 1920 are at present perpetual, but are likely to be limited by future legislation.

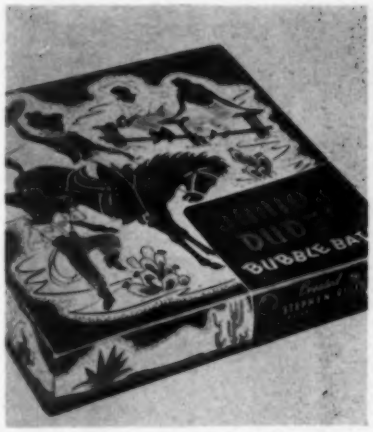
"10. Remember that a trade-mark is nothing but a signature or a stamp indicating the name of the producer or manufacturer. The more individualistic or original such signature or stamp is, the more easily it can be protected."

Transparent Plastic Containers

New packaging for perfumes, designed to add to their sales appeal and to provide a colorful accessory for the dressing table is offered by F. J. Nussbaum Co., Brooklyn, N. Y., in the form of brilliantly transparent, shatterproof containers of lucite for the bottle. These containers are designed expressly and exclusively for individual perfume manufacturers, being fabricated by the company from sheets of lucite. All of the containers are hand-machined and are so cut that light is reflected in a way to add to the brilliancy of the package. They may be engraved, painted or decorated by the silk screen process to secure any desired effect. Furthermore, they are available crystal clear, in pastel colors or any transparent colors, and when desired, frosted effects may be had. The containers are unbreakable, do not distort and are unaffected by moisture, alcohol or the temperature.

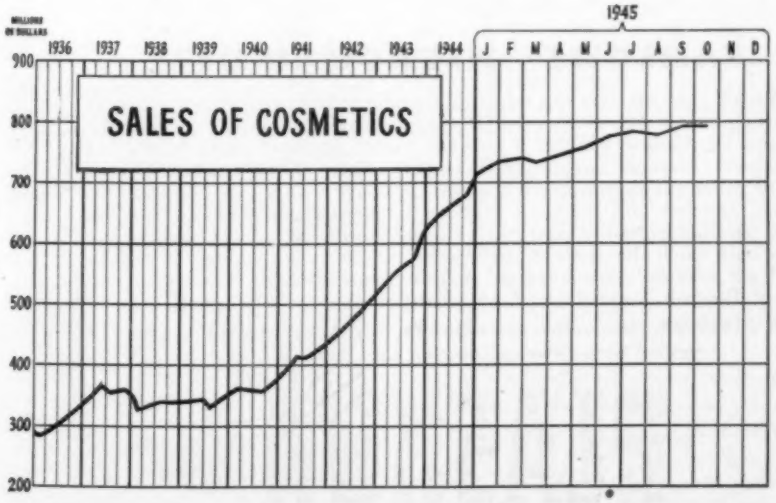
Jiffies and Snooties

The Tayton Co. is offering "Jiffies" and "Snooties," which are pieces of cloth and tissue impregnated with powder to be used as quick powder refreshers. These were designed for removing nose shine and refreshing makeup in public, although of course, they can be used any time, any place. "Jiffies" are made on cloth, and "Snooties" on tissue. Both come in handy, mirrored purse packet compacts. They can be transferred to a compact. While the idea seems to be a good one, the pieces of cloth and tissue do not hold the powder too well and handling them is somewhat of a messy business. If the



As running mates for Junior Dudes, an established seller, the Stephen Riley Co has developed three new bubble baths.

Cine Products has introduced Cine Lanolated Cream Shampoo, a delicately scented cream shampoo attractively packaged.



Retail sales of cosmetics for the twelve months ended with October 1945 totaled $792,700,000. This compares with $791,800,000 for the twelve months ended with September 1945 and with $674,902,000 for the twelve months ended with October 1944.

Timely gift items for returning servicemen are Thanks after-shave lotion and talcum in welcome home packages offered by Roberts Creations Co.

Famous Plastics

FOR FAMOUS MERCHANDISE . . .

PEGGY SAGE cosmetics are typical of the famous quality merchandise graced by beautiful, serviceable closures of Plaskon Molded Color. ☆ The high utility value of Plaskon enables it to meet varied physical characteristics of drug products. Plaskon is completely impervious to the effects of alcohol, acetone. or other common organic solvents. It is not affected by oils and fats; is odorless, tasteless and inert. ☆ Plaskon is available in a wide range of attractive, permanent colors, and can be molded into distinctive designs and shapes to help catch the eye and make sales. ☆ Ask your molder to demonstrate all of Plaskon's advantages. And experienced Plaskon men will help adapt Plaskon Molded Color to your particular requirements.

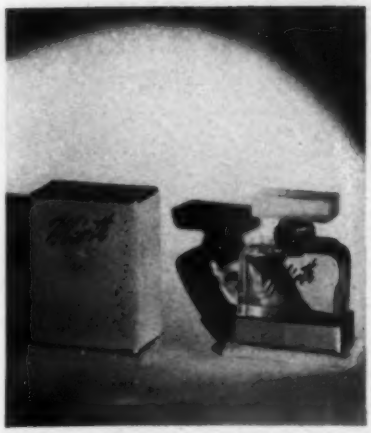
PLASKON DIVISION • Libbey-Owens-Ford Glass Co. • 2119 Sylvan Avenue • Toledo 6, Ohio

Canadian Agent: Canadian Industries, Ltd., Montreal, P. Q.

PLASKON

TRADE MARK REGISTERED

MOLDED COLOR



Mirth, a new perfume being introduced by S. Buchsbaum & Co., is a floral type fragrance also available in cologne.

Set in a transparent case of plexiglas, Dorothy Gray's Magic Hour perfume nestles on a base of white satin.

Swagger is the name of another new men's line introduced by Regent Labs., consisting of cologne, after-shave, deodorant, hairtone.

powder could be more securely impregnated into them, perhaps it would work out better. Available in three shades of Tayton's face powder, the cost is 25 cents, and sale will be at drug, department and five-and ten cent stores.

New Venture

The Diamond Match Co. has put on the market smart booklets of lipstick tissues packaged like book matches and intended for distribution by hotels, restaurants, beauty parlors, railroads, cosmetic counters and department and drug stores. The Diamond lipstick tissue booklets, a new venture for the match company, will be handed out free to women guests and customers just as book matches are given to tobacco purchasers. Under a long term contract signed with the patent holders, Diamond's experience in the book match advertising field will be used to interest national manufacturers of women's goods in space on the covers of the new tissue booklets. Rates on the booklets, as with matches, will be scaled so that revenues will reduce costs to the retailers to a point where they can give the tissues away to customers.

Transparent Trend

Gleaming transparent cases for beautiful perfume bottles may well be a trend now that materials and fabricators are relieved from their wartime jobs. Lucien Lelong used the transparent package most successfully in its Taglio perfume and now Dorothy Gray offers its new Magic Hour perfume set in a transparent case of plexiglass which gleams like a jewel making it an attractive package and also offers the advantage of making the handsome bottle visible for both display and subsequent dressing table display. The Dorothy Gray case is simpler in design than the Lucien Lelong which carries an intricate frosted motif with tiny flowers imbedded in the top of it.

Tone Repackaging

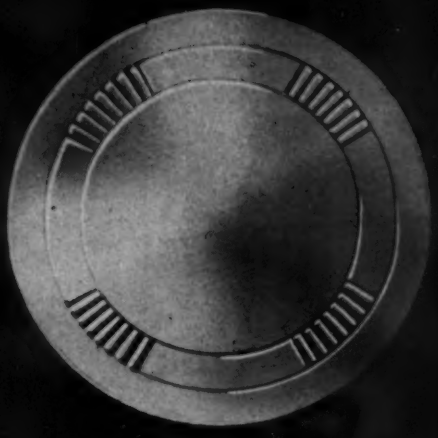
The Tone products have been smartly repackaged in delicate pastels and flower bouquet design in youthful dusty pink, making an appeal to the budding youth market. Keyed to youth, the Tone preparations now carry far more eye appeal than in the old packaging. Several new formulas have been added to the line and Tone is making every effort to capture some of the youth market with its preparations which are organized into four basic groups comprising corrective treatment, basic skin care, glamor make-up and fragrance specialties.

Smartly repackaged in delicate pastels and flower bouquet design in youthful dusty pink, are the Tone products.

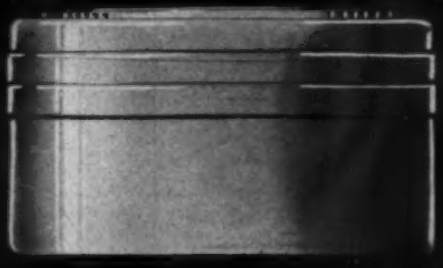
Sarong Talc has been added to the Sarong line offered by Matthew Products, Inc., packaged in a white, green and pink box.

Etchings is an interesting fragrance launched by Parfums de Renel, and packaged simply and effectively.

It Costs You No More to Achieve Beauty



Moulds cost you no more when designed with an eye to beauty as well as utility. In fact they cost you LESS because your product sells while the other fellow's stays on the counter. Broder constantly creates new ideas to increase your sales. From stock, or to your order "Containers with irresistible appeal."



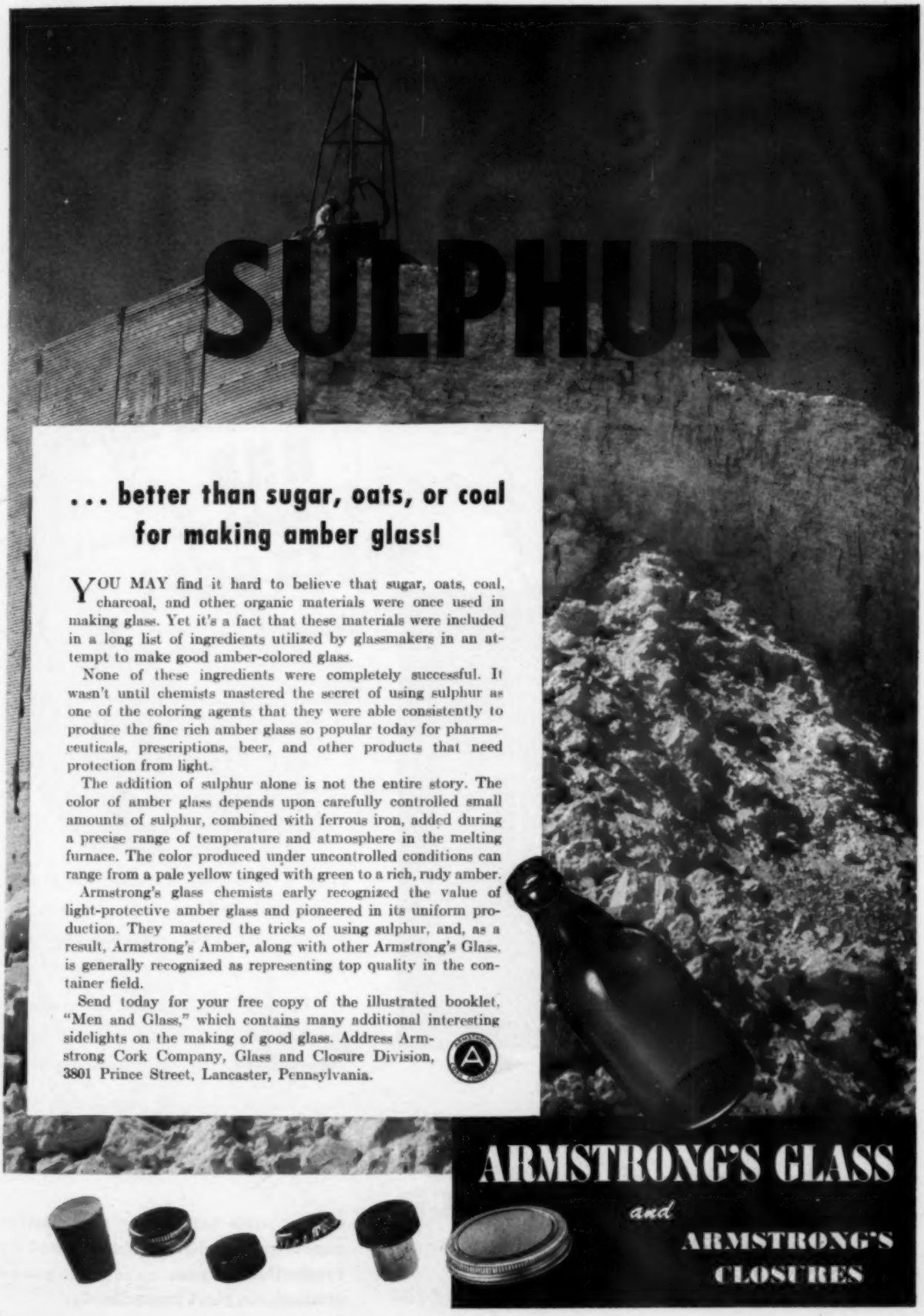
Another **BRODER** *product*

LIPSTICK CONTAINERS · ROUGE CONTAINERS · COMPACTS · VANITY CASES
MASCARA BOXES · CLOSURES · METAL AND PLASTIC SPECIALTIES

HARRY BRODER

167 WEST 64th STREET · NEW YORK 23, NEW YORK

TRafalgar 7-0092



. . . better than sugar, oats, or coal for making amber glass!

YOU MAY find it hard to believe that sugar, oats, coal, charcoal, and other organic materials were once used in making glass. Yet it's a fact that these materials were included in a long list of ingredients utilized by glassmakers in an attempt to make good amber-colored glass.

None of these ingredients were completely successful. It wasn't until chemists mastered the secret of using sulphur as one of the coloring agents that they were able consistently to produce the fine rich amber glass so popular today for pharmaceuticals, prescriptions, beer, and other products that need protection from light.

The addition of sulphur alone is not the entire story. The color of amber glass depends upon carefully controlled small amounts of sulphur, combined with ferrous iron, added during a precise range of temperature and atmosphere in the melting furnace. The color produced under uncontrolled conditions can range from a pale yellow tinged with green to a rich, rudy amber.

Armstrong's glass chemists early recognized the value of light-protective amber glass and pioneered in its uniform production. They mastered the tricks of using sulphur, and, as a result, Armstrong's Amber, along with other Armstrong's Glass, is generally recognized as representing top quality in the container field.

Send today for your free copy of the illustrated booklet, "Men and Glass," which contains many additional interesting sidelights on the making of good glass. Address Armstrong Cork Company, Glass and Closure Division, 3801 Prince Street, Lancaster, Pennsylvania.

ARMSTRONG'S GLASS

and

ARMSTRONG'S CLOSURES

YOU WAITED FOUR LONG YEARS FOR A REALLY

NEW PACKAGING IDEA!

Here, at last, is the idea that was worth the wait

A Dynamic Counter Display
AND
A Lovely Boudoir Accessory
ALL IN ONE!

One of many NUSSBAUM PLASTIC PRODUCTS available NOW and designed exclusively for you.

Exquisitely Different Lucite Packages designed expressly and exclusively for
YOUR PERFUME BOTTLES
and fashioned crystal clear or in any color of the rainbow!

Here is the packaging conception so new, so genuinely different, so seductively appealing that your creation commands priority attention wherever displayed.

It not only functions as an irresistible merchandising aid; it also makes a flattering addition to the vanity table, as well!

Each Lucite Container produced by us is custom-created by one of the outstanding plastic designers of Europe and America.

Call or write today for a consultation appointment without obligation. . . . Production of your *custom-created* product can start immediately.

F.J. Nussbaum & CO.

Designers of Plastic Originals

473 HUDSON AVE. • BROOKLYN 1, N. Y. • NEvins 8-2197

"Naw - he's not popular. It's that beautiful, new, modern Foster-Forbes Cosmetic Bottle he keeps waving around"

FOSTER-FORBES
Cosmetic Bottles
FOSTER-FORBES GLASS CO., MARION, INDIANA, U. S. A.

SALES REPRESENTATIVES . . .

KANSAS CITY	CLEVELAND	ATLANTA
DETROIT	MILWAUKEE	NEW YORK
CINCINNATI	ST. PAUL	MEMPHIS
CHICAGO	ST. LOUIS	LOUISVILLE
	HAVANA, CUBA	

"I've got a SWELL boss!"

Miss Jones: *"I mean it, Gloria! He's swell!"*

Gloria: *"Say, hold on there—what did he do?"*

Miss Jones: *"Well, I saw one of those popular Glass Container ads — you know, Mr. Slowey's ads — and read it to B. J. It said: Cash in on your accumulations of containers and caps. All shapes, all sizes. B. J. called Mr. Slowey right away."*

Gloria: *"So what happened?"*

Miss Jones: *"Mr. Slowey bought up our stockroom pile of bottles and caps just like that! Now we have lots of free space, a nice check, and I have a new fur coat that's a honey. That's B. J.'s bonus to me! Gee, I've got a swell boss!"*

THAT'S it, friends! Call us this minute—
We BUY (and SELL!) containers and caps
in All sizes, all quantities.

phone. ALgonquin 4-6066

glass container & cap outlet co.
876 Broadway
New York 3, N. Y.

What you should know about our big new radio show

It's "Celebrity Club"!

A half-hour show, "Continental Celebrity Club" has *everything* . . . a famous songstress, a top-notch comedian, genial host John Daly, a galaxy of guest stars, Ray Block and his orchestra, and a stirring dramatization of "the story behind the star." It's big-time!

Millions Listen!

Rating reports tell us millions of folks tuned in every week last year to our "Report to the Nation." Our exciting new show—on at the same time—is expected to become even *more* popular!

Folks Love It!

"Wonderful!" "Exciting!" "Entertaining!", say the fan letters that pour into Continental's offices daily. And—remember—a friend of ours is a friend of *yours!*

Coast to Coast!

147 stations on the Columbia Broadcasting Company's far-flung national network. Reaches into every nook and cranny of the great mass market that is America.

Famous Celebrities!

Stars of stage, screen and radio, as well as colorful, prominent personalities from other walks of life, are featured on every program . . . a big reason why Continental Celebrity Club draws so many listeners!

Sells for You!

Hard-selling (but easy-to-listen-to) commercials tell the American buying public the value of your products. It's your show as much as ours!

REMEMBER CONTINENTAL!

The only can company on the air

Continental's big radio show is doing a big job for you. Keep your eye on Continental and on our Triple C—the trade mark that stands for the best in quality, best in service.

Tune in!

"CONTINENTAL CELEBRITY CLUB"

(SAT. AT 10:15 EST OVER CBS)

It's for you!

CONTINENTAL CAN COMPANY

100 East 42nd Street, New York 17, New York

New Beauty

FOR COSMETIC AND TOILETRIES PACKAGES WITH PERMANENCY-TESTED SILK SCREEN PRINTING

Durable and Permanent—attractive embossed-effect print remains constant through daily use. Adds distinctive eye-appeal.

Alcohol and Oil Resistant — also rub-proof and water-proof, on plastics, metal, glass, wood and other surfaces.

Economical — saves cosmetic, drug and toiletries manufacturers many hours of labor in the application of decorations, trade-marks, and designs on all types of containers.

For detailed information write, wire or phone . . .

PACKAGING INDUSTRIES

919 NORTH MICHIGAN AVENUE • CHICAGO 11, ILLINOIS

SOLE REPRESENTATIVES FOR SCREENCRAFT COMPANY • CHICAGO, ILLINOIS

BEAUTY AND THE BEAST*

*(*A Cantankerous Closure)*

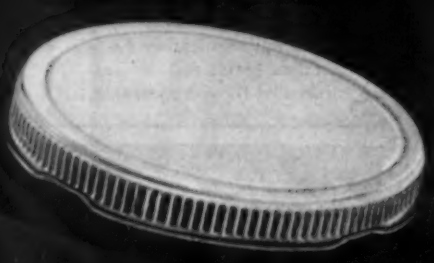
Anchor
CONTAINERS AND CAPS

MARY is in no mood at the moment to explain her difficulty, so we will. This package which she purchased yesterday was expected to do big things. But the closure won't budge. No, it won't spoil Mary's day, but it has spoiled the possibility of repeat sales.

An Anchor Amerseal Cap could have saved a customer here and assured many repeat sales. For the Amerseal Cap was developed with feminine fingers in mind. It removes and reseals with an easy, simple quarter-turn. Amerseal Caps won't gum or freeze to the container finish because they employ lugs rather than threads to effect the seal and these make contact only at the points where each engages the under side of the glass thread.

Regardless of the nature of your product, be it adhesive, oily, volatile or effervescent, you can depend on Anchor Amerseals to provide perfect airtight, leakproof seals and to create good-will and repeat sales for the products entrusted to them.

PRODUCTS OF
ANCHOR HOCKING GLASS
CORPORATION
LANCASTER, OHIO



Paisley
SCIENTIFIC ADHESIVE SERVICE

Here's What Paisley Scientific Research Means to You!

EACH adhesive is compounded exactly for your particular problem, from the raw materials best suited to your needs. There is no compromise. Your problem determines the formula, for PAISLEY works with *all* adhesive raw material bases, such as: 1. Starch, 2. Animal, 3. Protein, 4. Resin, 5. Rubber, 6. Asphalt, 7. Wax, 8. Gum.

Thousands of adhesive formulae have been compounded from these main adhesive bases, each one having special qualities that suit it to a specific packaging, labeling or sealing operation. So, for tailor-made adhesives compounded specifically for your own adhesive operation . . send all the facts to Paisley.

SEND FOR . . *the convenient Adhesive Operation Data Sheet. It helps you supply the information our adhesive chemists require concerning your adhesive operation. This data sheet is your guide towards getting the ONE best, most efficient adhesive for the operation you describe. Trial shipment will be sent on approval if desired. This skilled laboratory service does not obligate you. It's the SURE . . the* modern *way to buy adhesives!*

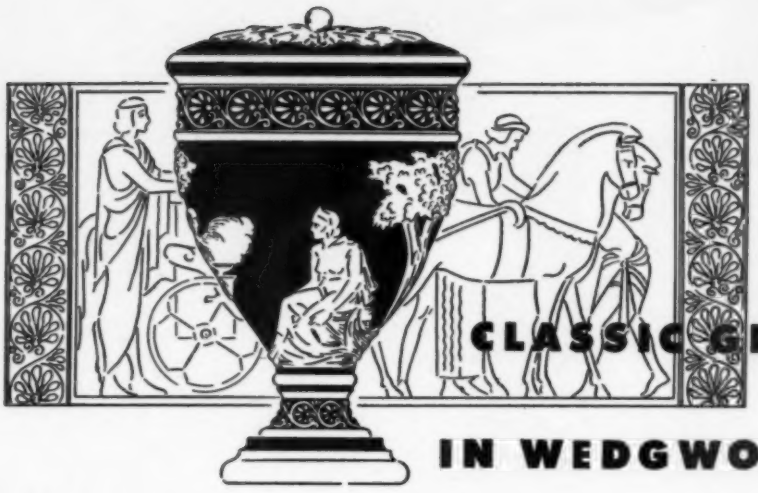
PAISLEY BOTTLE LABEL MACHINE GLUE No. 2978

A fast labeling glue for World, Ermold, Oslund, Pony Labelrite, National, semi-or-fully automatic machines. Also for Pneumatic Scale, McDonald, Weeks, World Straight-away type machines. This one glue embodies all the qualities desired in the perfect machine labeling glue for bottles. Quick tack, non-stringing, non-feathering, it handles plain, foil, or varnished labels with equal ease.

PAISLEY PRODUCTS INCORPORATED

Manufacturers of Glues, Pastes, Resin Adhesives, Cements, and Related Chemical Products

1770 CANALPORT AVE., CHICAGO 16, ILL. ★ 630 W. 51st STREET, NEW YORK 19, N. Y.



CLASSIC GREECE . . .

IN WEDGWOOD CHINA

White figures, designed by the great artists of the day, or taken from classical models—raised on a background of blue, green or black . . . that, to most people, typifies Wedgwood. Josiah Wedgwood spent many years developing and perfecting the patterns and methods for making this popular china. The superb quality of Wedgwood's work is attested by the fact that his china has survived the changes of two centuries...and still retains its characteristic forms, designs and colors.

We, at Carr-Lowrey, have devoted years to perfecting the methods and materials for making finer glass containers. For half a century this pride in craftsmanship has characterized our organization. It has earned for us the confidence of the buyers of "extra quality" glass containers.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD.
New York Office: 500 FIFTH AVE.
Chicago Office: 1502 MERCHANDISE MART

Fontaine
Announces
BRASS LIPSTICK CONTAINERS
and new styles in
All-Plastic Lipstick Containers
Medium and jumbo lipstick containers
All brass
Combination brass and plastic containers
Various styles
ALL-PLASTIC LIPSTICK CONTAINERS
Swivel container — medium and jumbo sizes.
Small container for medium size lipstick.
CAPS AND CLOSURES
Ball caps, 18-20-22 mm.
Straight caps, 18-20-22 mm.
standard GCA threads.
Wood closures for men's and
women's toilet waters.
Others in all sizes and colors.
DECORATIVE PROCESSES
Silk Screening, Gold Leaf Printing
and Spraying. Designs created.
"MIRRO-METAL" FINISH
An exclusive Fontaine mirrored metallic
process in gold, silver, and
sparkling colors on glass,
plastic and base metals.
FONTAINE PRODUCTS CO.
ART IN PLASTICS
306 EAST 61st STREET, NEW YORK 21, N. Y.

"I'll Take Vanilla"

MEANS ANOTHER JOB FOR DODGE MILBOSSED-TOP CORKS

The popularity of vanilla ice cream has made those three words famous from coast-to-coast. It has also created keen competition among the producers of vanilla flavorings used by ice cream manufacturers.

To hold a top spot in this market, Balch Flavor Company of Pittsburgh, Pa., marketers of Vanimite vanilla flavoring, has selected an extremely attractive package.

Of course, they specified Dodge Milbossed-Top Corks—the attractive, dependable, self-sealing closures that provide the extra sales appeal and protection for products in a highly competitive market.

If you market foods, drugs, cosmetics or liquors, let us show you how Dodge Milbossed-Top Corks can help solve your sealing and selling problems. Write for information and prices today.

DODGE CORK COMPANY, INC., LANCASTER, PA.

DODGE CORK Closures

Designed to Guard the Integrity of the Contents

Show Off Your Product in LUSTEROID

Why hide your product in packages folks can't see through?

Merchandising today calls for packaging that displays as well as protects and there is no better medium for visibility than crystal-clear LUSTEROID vials and tubes.

These modern plastic containers are feather-light, yet strong, rigid and unbreakable. They come in all colors of the rainbow—clear or opaque. There are no labels to affix because Lusteroid is printable. No special packing or partitioning required. You save money in packing and shipping so that Lusteroid packaging actually pays for itself.

Standard sizes from ¼" to 1¼" in diameter and lengths up to 6". Cork, clip-on or screw-cap closures.

Write for full details.

LUSTEROID CONTAINER CO., INC.

Formerly Lusteroid Division of Silcocks-Miller Company

Office and Factory

10 W. PARKER AVENUE, MAPLEWOOD, N. J.
MAILING ADDRESS: SOUTH ORANGE, N. J.

Two Proven Winners!

W. BRAUN cut-glass type Decanters have proven to be instant sales winners wherever featured. While we have made some restrictions previously, we can now ship to certain additional territories. Write us your needs over the coming year for full particulars.

W. BRAUN CO.

Over 1/3 Century of Dependability

304 N. CANAL ST. • CHICAGO 6, ILLINOIS

This is the HUNDREDTH YEAR That Swindells Have Been Making Glass in Baltimore . . . .

WILLIAM E. SWINDELL started making glass in Baltimore back in 1847—and ever since successive generations have carried on in this business.

That bit of history is important to *you*—because glass making is an art as well as a business, and the accumulation of past experience and experiments, knowledge and know-how is at your service when you bring your bottle problems to Swindell. As a matter of fact, many a Swindell worker can boast a father and grandfather who, in their day, were on the Swindell payroll and passed their secrets of peculiar skills from father to son.

Whether you need hand made or machine made bottles, private mould or stock models, you can profit by Swindell's outstanding reputation as fine bottle makers.

SWINDELL BROTHERS, Inc.
BALTIMORE 30, MARYLAND
200 FIFTH AVENUE, NEW YORK ROBERTO ORTIZ • HAVANA, CUBA

Swindell

Faster Filling
OF CONTAINERS

Use this Anderson Filler, Model C-2, for liquids, semi-liquids, creams, pastes and greases. Dispensing capacity up to one pint per stroke. Fills practically all types of containers . . . jars, bottles, cans or tubes. The machine is fast, easy to operate, sanitary and easy to clean. Write for prices and full details.

Ask for Bulletin No. 1-24

ANDERSON BROS. MFG. CO.
ROCKFORD, ILL.

Anderson Fillers

FLEET PATENT BOX CO.

140 West 42nd St. New York City
Phone La-4 538)

Paper Boxes — Folding and Set-Up
. Transparent Acetate Containers .
. . Embossed Cellulose Top-Pads . .

25 years experience in designing and manufacture of packaging specialties.

MANUFACTURING * DESIGNING * ASSEMBLING *

Tubing of all types manufactured to your design for dispensers, sprayers, and applicators.

Specialists in small mechanical products of all types with a complete assembly service.

Consult our engineering specialists regarding any of your problems.

ROBERTS MFG. CO.

304 East 23rd Street New York City, 10

....LAST WORD IN "ON THE PACKAGE" PRINTING SENDS HELENA RUBINSTEIN'S "HEAVEN SENT" OUT INTO THE WORLD SELF-ASSURED AND LOVELY IN ITS PERFECTION.

SILK SCREEN PRINTERS TO THE COSMETIC FIELD
CREATIVE PRINTMAKERS GROUP
14 WEST 17 STREET • CHELSEA 3-6803-4-5

SHEET METAL GOODS

SPRINKLER TOPS

CORK TOPS DOSE CAPS

CONSOLIDATED
FRUIT JAR COMPANY

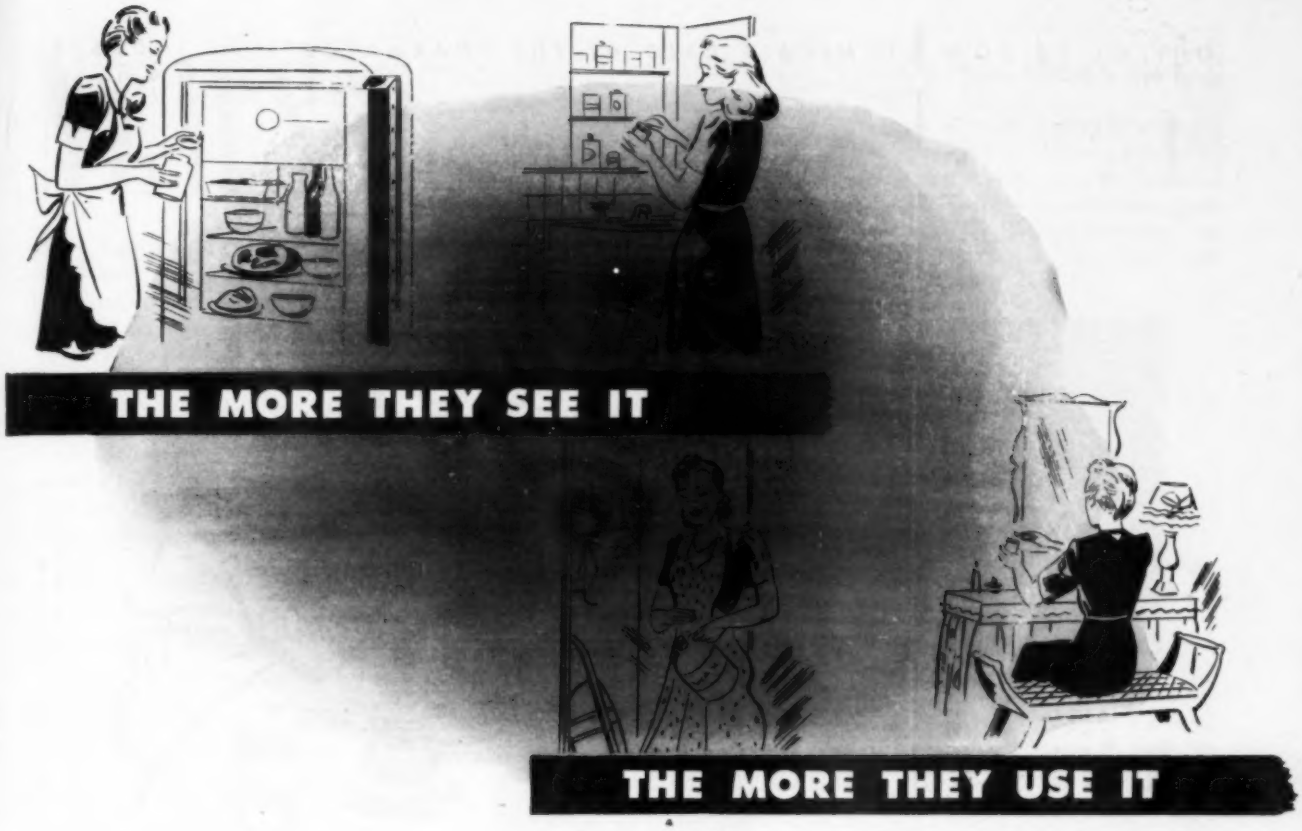
NEW BRUNSWICK, N. J.

CONSOLIDATED OFFERS

1—World automatic Straightaway Labeller.
1—90 gal. stainless steel jack. Kettle.
1—No. 5 Sweetland Filter, 20 copper leaves.
1—Stokes Auger type Powder Filler.
1—Semi-automatic Labeling Machine.
5—Dry Powder Mixers, up to 2000 lbs.
20—Aluminum, Copper, Glass Lined, jacketed and agitated Kettles.
1—Abbe Blutergess Sifter No. 2.
2—Colton No. 3 Toggle Presses.
3—Stokes Steam Water Stills, 5, 10, 25 gal. per hour.

Only a partial listing. Send us your inquiries.

We buy and sell from a Single Item to a Complete Plant
CONSOLIDATED PRODUCTS CO., INC.
20-21 Park Row, New York, N. Y. Shops: 335 Doremus Ave., Newark, N. J.



. . . and they SEE it in GLASS!

THE more your customer sees the product she has bought, the more she uses it . . . and the *quicker* she returns to the store to buy *more.*

Housewives like glass-packed drugs, proprietaries and chemicals because of their convenience and sanitary qualities. The glass container is impervious to moisture, won't rust or corrode, is easy and safe to open and can be resealed over and over again to protect unused portions. And because of its transparency, the glass container warns when the product supply is getting low—indicating that it's time to reorder. An Anchorglass container is inherently attractive; inert to the action of most drugs and chemicals; and a most honest container.

Because housewives *prefer* glass packages to other styles of containers is in itself sufficient reason for you to investigate modern Anchorglass packaging. But there are many other advantages to be gained by packing in glass which we would like to explain to you.

ONE OF 96 DOW CHEMICALS USED BY THE PHARMACEUTICAL INDUSTRY

a tip from cosmetics

for men using pigment binders, and film forming agents

Need a pigment binder in your product? Or a film forming agent? Then it may profit you to eavesdrop on an experience of the cosmetic industry. When silk stockings became an early war casualty, ladies demanded leg make-up preparations. But specifications laid down by the feminine sex were pretty tough—leg make-up must stay on and not wear off in spots, must be free of odor, harmless to the skin, uniform and stable in color, sufficiently viscous to prevent running before drying, be unaffected by perspiration—truly an imposing list of requirements.

Cosmetic executives consulted with Dow research technicians and numerous experiments followed. The final answer was Methocel. Why? Because this water soluble Dow cellulose ether, an excellent pigment binder, holds the color fast to the leg. It also acts as a film forming agent on the skin producing proper luster and opacity. It is odorless, viscous, harmless to skin, exceptionally uniform, reduces pigment settling in the bottle—all in all a perfect solution for a perplexing problem.

The same sterling qualities of Methocel may help improve your product. We'll be glad to send more information.

THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

New York • Boston • Philadelphia • Washington • Cleveland • Detroit • Chicago
St. Louis • Houston • San Francisco • Los Angeles • Seattle

Methocel

Water Soluble Dow Methylcellulose

DOW

CHEMICALS INDISPENSABLE TO INDUSTRY

NEWS . . .

FDA Advances Crawford, Larrick, and Elliott

C. M. Crawford, who has been Acting Assistant Commissioner of the Food and Drug Administration, since the retirement of W. G. Campbell, has been appointed Associate Commissioner. George P. Larrick, who has been Chief of the Food and Drug Inspectors for the Administration since 1939, was made an Assistant Commissioner, and Dr. Lewis Elliott, who is in charge of enforcing the food provisions of the Act, has also been elevated to an Assistant Commissioner.

Gregory Thomas Returns

H. Gregory Thomas, formerly vice-president of Bourjois, Inc., who severed his connections with this industry early in 1942 to engage in Government service, has returned to this country from Portugal and Spain, where he has been stationed since the middle of 1943 as economic attache at the American embassies.

Creasy Heads Burroughs-Wellcome

G. S. Dunbar retired from the board of Burroughs Wellcome & Co. (U.S.A.) Inc. and from the office of president and general manager the end of the year.

W. N. CREASY

W. N. Creasy, general manager of Burroughs Wellcome & Co. (Canada), has been elected to the board of directors of Burroughs Wellcome & Co. (U.S.A.) Inc., and succeeds Mr. Dunbar as president and general manager.

H. B. Fonda, vice-president in charge of production, has been nominated senior vice-president and E. W. Rigg has been appointed distribution manager.

Altshul Heads DCAT

Harold N. Altshul, president of Ketchum & Co., Inc., was elected chairman of the Drug, Chemical and Allied Trades Section of the New York Board of Trade at the organization meeting of the new Executive Committee, held at the Drug and Chemical Club, December 13. Other officers elected were: vice-chairman, Dr. Carle M. Bigelow, director of pharmaceutical department, Calco Chemical Division of the American Cyanamid Co.; treasurer, Robert B. Magnus, vice-president, Magnus, Mabee & Reynard, Inc. (re-elected); acting secretary, Helen L. Booth, New York Board of Trade, Inc. (re-elected).

HAROLD M. ALTSHUL

Carl M. Anderson, assistant to the president, Merck & Co., Inc., was reappointed counsel.

The retiring chairman, Guy L. Marsters, vice-president of the Norwich Pharmacal Co., was presented with a white Catalin gavel in recognition of his services during the past year. He automatically becomes a member of the Section's Advisory Council which consists of the ex-chairman for the past five years.

Bristol Labs. Get Penicillin Plant

The penicillin plant of Bristol Laboratories, Syracuse, N. Y., has been purchased by that firm from the Reconstruction Finance Corp., it has been announced by P. C. Sayres, president.

The plant was designed and constructed under the direction of the Bristol Laboratories staff in 1943 for the Defense Plant Corporation and has since been occupied under a lease arrangement. The sale was consummated December 28.

Dorland Heads SOCMA and Trade Board

Ralph E. Dorland of the Dow Chemical Co., New York, has been honored by being elected president of the Synthetic Organic Chemical Manufacturers Association. Mr. Dorland has also been elected president of the New York Board of Trade for 1946.

RALPH E. DORLAND

The Synthetic Organic Chemical Manufacturers Association held its twenty-fourth annual meeting December 11 and for only the second time in its history elected a new president. Mr. Dorland succeeds August Merz who succeeded the first president, Charles H. Herty, in 1926. Other officers elected were: 1st vice-president, Dr. Elvin H. Hillheffer, of E. I. du Pont de Nemours & Co., Wilmington; 2nd vice-president, Dr. Eric C. Kunz of Givaudan-Delawanna, Inc., New York; treasurer, C. M. Richter of the Pharma Chemical Corp., New York.

Other members of the board of governors are: Dr. Wyly M. Billing, Hercules Powder Co., Wilmington; George W. Burpee, General Aniline & Film Corp., New York; Harold W. Dingee, Zinsser & Co., Hastings-on-Hudson, N. Y.; Dr. August Merz, Calco Chemical Division, American Cyanamid Co., Bound Brook, N. J.; and Harold L. Simons, Harold L. Simons, Inc., New York.

As president of the New York Board of Trade, Mr. Dorland succeeds John B. Glenn, president of Pan-American Trust Co., who becomes chairman of the board. H. L. Brooks, president of Coty, Inc.; Richard V. Goodwin, vice-president, Fireman's Fund Indemnity Co.; Warren L. Baker, manager, Aviation Division, Socony-Vacuum Oil Co., were all elected vice-presidents.

Jesse L. Hopkins, who holds the distinction of being the oldest member of the New York Board of Trade, was elected honorary vice-president. Mr. Hopkins was treasurer forty years ago.

ORBIS "Aquaspray"

PERFUME OILS

(REQUIRE NO ALCOHOL)

ORBIS "AQUASPRAY" PERFUME OILS are recommended for the preparation of sprays for deodorizing and purifying foul air in homes, institutions, hospitals, theatres, etc. They require no alcohol.

By merely mixing 3 ounces of Aquaspray Perfume Oil and 3 ounces of Formaldehyde Solution U. S. P. with sufficient water to make 1 gallon, a spray in a permanent milky emulsion form is obtained at a finished cost of less than 38 cents per gallon.* This is a real profit producer.

*Based on the gallon price of "Aquaspray."

ODORS AVAILABLE

Apple Blossom	Honeysuckle	Mint	Pineneedle
Bouquet Kashmiri	Jasmin	Narcisse	Rose
Bouquet #550	Lavender	New Mown Hay	Syringa
Carnation	Lilac	Orange Blossom	Violet
Gardenia	Locust Blossom	Persian Bouquet	Wintergreen

PRICE: $2.00 per pint, $14.00 per gallon

A request on your letterhead will bring further details and sufficient sample for 1 quart of finished spray.

ORBIS

PRODUCTS CORPORATION

215 PEARL STREET, NEW YORK · FACTORY & LABORATORY, NEWARK, N.J.

CHICAGO 660 North Dearborn St. · PHILADELPHIA 610 Brown Bldg. · MEXICO, D.F. Apartado Postal 8919 · BOSTON 89 Broad Street · LOS ANGELES 1807 E. Olympic Blvd. · MEMPHIS, TENN. 1620 Carr Ave.

Water Soluble Gums	Waxes	Cosmetic Raw Material	Fruit Flavors
Thymol	Stearic Acid	Oleo Resins	Food Colors
Aromatics	Essential Oils	Perfume Bases	Quince Seed
Rice Starch	Zinc Oxide French	Olive Oil	Irish Moss

Elmer Bobst Heads William R. Warner

Elmer H. Bobst, one of the pioneers in the development of interest in hormones and vitamins in both the medical and food fields, has assumed the presidency and general direction of William R. Warner & Co., Inc., together with its domestic and foreign subsidiaries.

Mr. Bobst, former president of Hoffmann-LaRoche, Inc., has taken over the duties of the chief executive of William R. Warner & Co., from G. A. Pfeiffer, who is withdrawing from the business, at the age of seventy-three, to engage in educational and charitable activities. Major units in the firm include Richard Hudnut, the Du Barry Success School and Standard Laboratories, which comprise a dozen or more companies with nationally advertised products. The firm's export business, amounting to approximately 30 per cent of its total volume, reaches into 82 foreign countries, served by seventeen foreign Warner companies which own their own establishments and plant facilities.

Mr. Bobst has stated that his immediate objectives will be a widening of the scope of the Warner Institute for Research in developing new remedies in step with advanced pathology and improving existing ones; an extensive and original program for pooling of pharmaceutical research by several pharma-

ELMER H. BOBST

ceutical firms here and abroad; and a continuation of his efforts in what he terms the advance of "pharmaceutical elegance"—making medical products pleasant and easy to take.

Mr. Bobst was born in December 1884 and at the age of seventeen went to work in a retail drug store in Philadelphia. In 1904 he passed the state examination and became a qualified pharmaceutical assistant. A year later he became a registered manager, qualified to operate a drug store. He left the drug business for a short time to study law but in 1908 returned to pharmacy in Philadelphia. He joined Hoffmann-LaRoche in 1911, was made general manager in 1921. When he joined the company it had 34 employees in a small loft building in Manhattan. When he retired from the presidency, October 16, 1944, it had 1,800 employees and a plant consisting of 40-odd buildings on a 104-acre site in Nutley, N. J.

Merck Names Neill in New York

Merck & Co., Rahway, N. J., has announced the appointment of John F. Neill as manager of the New York branch of the company.

JOHN F. NEILL

A native of St. Joseph, Mo., Mr. Neill joined the company in 1935 after graduation from the University of Pennsylvania Wharton School of Finance and Commerce with a B.S. degree in economics. He held various merchandising and sales positions with the company and was calling on the trade in New York when he was called to active duty in the U. S. Naval Reserve in August 1942.

Upon his return from service in May 1944, Mr. Neill was made assistant manager of the New York branch.

JAMES McINNES, JR.

Newly elected president of the Salesmen's Association of the American Chemical Industry, Inc.

Royal Manufacturing Co. Sold

At the annual meeting of the stockholders of the Greater New York Industries, Inc., Lowell M. Birrell, president, announced the expansion of the activities of the company into the drug manufacturing field through purchase of controlling interest in the Royal Manufacturing Co., Duquesne, Pa. The Royal Manufacturing Co., for forty-two years a manufacturer of drugs and pharmaceuticals, has plants in Chicago, Brooklyn, and Duquesne and a refinery in Warren, Pa., for production of oils for pharmaceutical purposes.

Mr. Birrell also reported that the Greater New York Industries, Inc., had during the year acquired a substantial number of shares of common stock of Claude Neon Lights, Inc., and that through various subsidiary and affiliated companies, the Greater New York Industries, Inc. now has an interest in Abercrombie and Fitch, Amenostat Corp. of America, General Water, Gas and Electric Co., Henry Holt and Co., International Utilities, Securities Corporation General, and the Union Aircraft Products Corp.

Perry—Com. Solvents Exec. V. P.

Henry E. Perry of New York has been elected executive vice-president of Commercial Solvents Corp. He was formerly vice-president in charge of production,

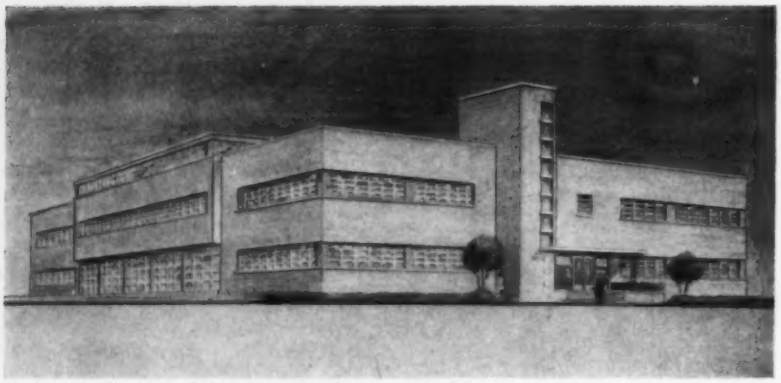
HENRY E. PERRY

a position to which Maynard C. Wheeler of Terre Haute, Ind., production manager, succeeds.

In his new post, Mr. Perry will supervise all activities of Commercial Solvents in Terre Haute, Ind., Peoria, Ill.; Agnew, Calif.; Harvey, Westwego and Sterlington, La.

Schering Opens in San Francisco

Schering Corp. with manufacturing plants at Bloomfield and Union, N. J., has announced the opening of a new branch office at 149 New Montgomery St., San Francisco 5.



Architect's drawing of the new plant being erected by Upjohn Co. for the manufacture of antibiotics.

N. Y. Q. Elects R. McKesson Exec. V.P.

Directors of New York Quinine and Chemicals Works, Inc., have appointed

ROBERT I. McKESSON

Robert I. McKesson executive vice-president to fill the vacancy created by the death of Francis J. McHugh. He has rejoined the company after serving for five years in the United States Army, in which he was a lieutenant colonel.

Malcolm F. and Keith McKesson, who served as captains in the European Theater during the war, have been elected directors of the company.

Remus Moves Warehouse

Edward Remus & Corp. has moved its New York warehouse to larger quarters at 616 West 44 St.

Nessler to Manage J. T. Baker Exports

Carl Nessler has joined the J. T. Baker Chemical Co. as export manager, it has been announced by G. B. Hafer, general sales manager.

Partrick to Promote Penick Exports

Walter A. Partrick has joined S. B. Penick & Co. and will have charge of the company's promotional work in the export field.

Emerson Drug Buys Jeurelle

Emerson Drug Co., Baltimore, has purchased Jeurelle, Inc., New York, distributor of "Jeurelle" perfumes and bath preparations and "Seventeen" cosmetics.

Stauffer Buys Tartar Chemical Works

Stauffer Chemical Co., New York, through its wholly-owned subsidiary, American Cream of Tartar Co., San Francisco, has purchased the Tartar Chemical Works, Brooklyn, N. Y., a subsidiary of Standard Brands.

Hanson Heads McK. & R. Export

Robert L. Hanson has been appointed vice-president in charge of the export division of McKesson & Robbins, Inc. Mr. Hanson was formerly vice-president and manager of the Providence (R.I.) division of the company, and president of the McKesson Liquor Co. of Rhode Island. He entered the wholesale drug business in 1922 as manager of Charles Leich & Co., Evansville, Ind.

He succeeds John T. Stebe, who retired January 1, after fifty-three years with the company.

Marschalk—McKelvey Sales Mgr.

H. Robert Marschalk has been promoted to sales manager of the Alfred D. McKelvy Co. He recently joined the McKelvy Co. as assistant to the president on sales after four years as a lieutenant in the Navy. Prior to the war, Mr. Marschalk was assistant sales manager of Vick Chemical Co.

Johnston Named United Drug V.P.

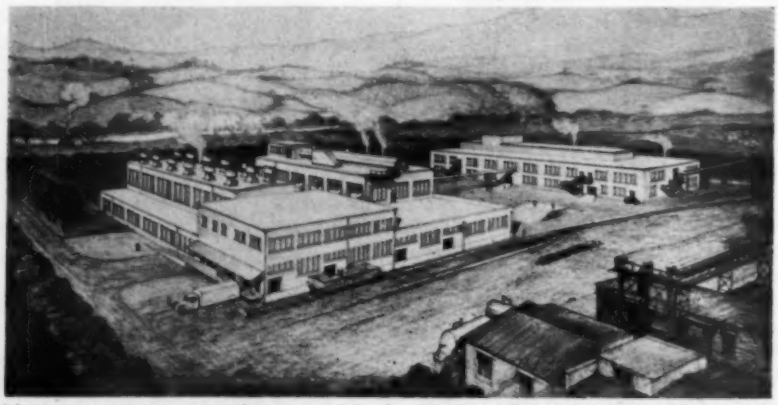
The election of W. G. Johnston of Chicago as vice-president of United Drug, Inc., has been announced in Los Angeles by Justin W. Dart, president.

Mr. Johnston has resigned as vice-president and director of the Walgreen Co., Chicago, after twenty-three years of service with the company, for the past several years as director of the company's retail store operations.

W. G. JOHNSTON

In his new position, he will supervise the operations of all retail stores owned by United Drug, including the 346 Liggett stores in the eastern and central United States, and the 180 Owl and Sontag stores on the Pacific Coast.

Mr. Johnston was born in Chicago forty-three years ago and is a graduate of the University of Illinois College of Pharmacy.



New streptomycin unit under construction by Merck & Co. at its Stonewall plant in Elkton, Va.

Nay Heads Chic. Perfumery Assn.

Walter R. Nay, Chicago manager of the Mallinckrodt Chemical Works, was elected president of the Chicago Perfumery, Soap & Extract Association, at

WALTER R. NAY

its annual meeting December 4. The retiring president is F. A. Degener of Heyden Chemical Corp., under whose leadership the association's active membership reached a new high of more than 350 in 1945.

Other officers elected were: Stanley Lind, Harry Holland & Son, Inc., vice-president; Carl W. Edwards, Fritzsche Bros., Inc., secretary, and W. F. Kammerer, George Lueders Co., treasurer.

Fritzsche Holds Dinner-Dance

Fritzsche Brothers, Inc. held its first year-end sales conference and annual dinner-dance since early in the war at the Hotel New Yorker during the week of December 11 and brought together all department heads and the representatives from branch offices throughout the United States and Canada. Two outstanding features of the meeting were showing of colored motion pictures taken by representative Charles C. Bryan while on special duty with the U. S. Air Force in Tibet, and a discussion of cordial flavors by Dr. Darrell Althausen who recently became a member of the Fritzsche research staff.

Dr. Heminway Joins Schering

Dr. Norman L. Heminway has been appointed to the medical promotion staff of Schering Corp. He is a graduate of Franklin and Marshall College and the University of Pennsylvania Medical School and practiced medicine for some years in Somerville, N. J.

He entered the United States Army Medical Corps in January 1941 and at the time of his release was a full colonel. For a time he was surgeon of the Green-

NORMAN L. HEMINWAY

land Base Command and supervised the establishment of all medical installations there. After nineteen months in the Arctic, Dr. Heminway was recalled to Washington to prepare a survey of the military medical care in that area. He was later made Hospital Ship Commander of the USAHS Wisteria which became famous for its casualty evacuation activities.

Ingram Leaves Bristol-Myers

Robert J. Ingram has resigned as sales promotion manager of Bristol-Myers Co. to become executive vice-president of Fair Trade Merchandising

ROBERT J. INGRAM

and its affiliate, Drug Sales Builders, Inc.

Maudy to Open in New York

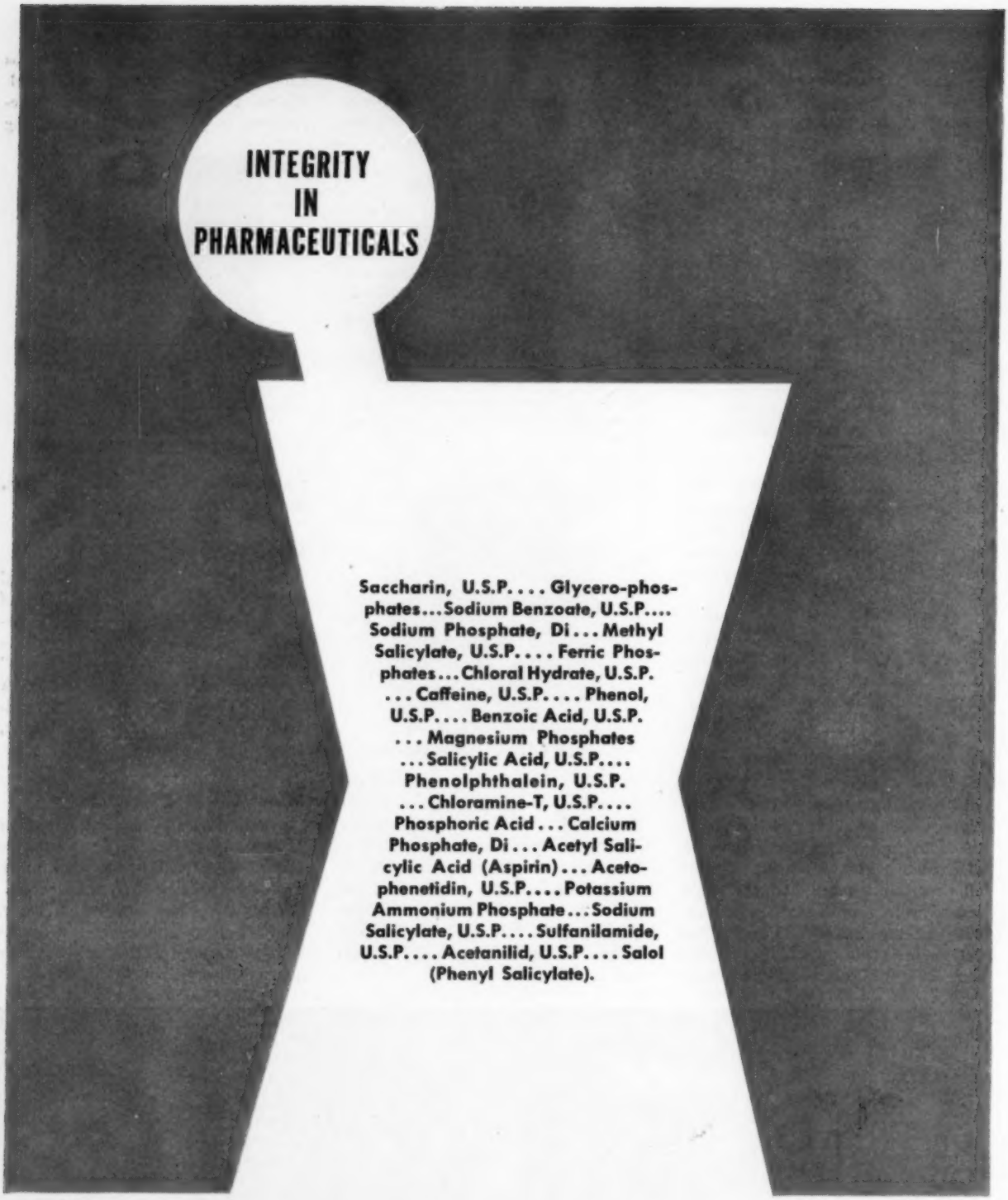
Mr. and Mrs. Rene Foy, general manager and president respectively of Maudy, Paris export perfume laboratory, have arrived in New York, accompanied by their daughter, "Maudy" to reopen the company's New York office. They are making their headquarters at the office of George Baring, 745 Fifth Ave., New York.

Wyeth Opens in Cleveland

Wyeth, Inc., Philadelphia, subsidiary of American Home Products Corp., has opened a sales office in the Truman Building, 1030 Euclid Ave., Cleveland.

Andy M. Clark, division manager, who has been with Wyeth Inc. since 1932 is in charge of the new office. The phone is Cherry 7241.

Fritzsche Brothers Inc. held a dinner-dance at the Hotel New Yorker, New York, at the close of its year-end sales conference.


INTEGRITY
IN
PHARMACEUTICALS
Saccharin, U.S.P. . . . Glycero-phosphates . . . Sodium Benzoate, U.S.P. . . . Sodium Phosphate, Di . . . Methyl Salicylate, U.S.P. . . . Ferric Phosphates . . . Chloral Hydrate, U.S.P. . . . Caffeine, U.S.P. . . . Phenol, U.S.P. . . . Benzoic Acid, U.S.P. . . . Magnesium Phosphates . . . Salicylic Acid, U.S.P. . . . Phenolphthalein, U.S.P. . . . Chloramine-T, U.S.P. . . . Phosphoric Acid . . . Calcium Phosphate, Di . . . Acetyl Salicylic Acid (Aspirin) . . . Acetophenetidin, U.S.P. . . . Potassium Ammonium Phosphate . . . Sodium Salicylate, U.S.P. . . . Sulfanilamide, U.S.P. . . . Acetanilid, U.S.P. . . . Salol (Phenyl Salicylate).

The integrity of Monsanto pharmaceuticals is assured by continuous and exhaustive laboratory research, chemicals of correct-to-decimal-point purity, long experience in compounding and processing and constant, strict laboratory control. As a large-scale producer of U.S.P. grades of a wide range of chemicals used by leading pharmaceutical and drug companies, Monsanto will gladly consult with you. Just contact the nearest Monsanto office, or write: MONSANTO CHEMICAL COMPANY, ORGANIC CHEMICALS DIVISION, 1700 South Second Street, St. Louis 4, Missouri. District Offices in: New York, Chicago, Boston, Detroit, Charlotte, Birmingham, Los Angeles, San Francisco, Seattle, Montreal, Toronto.

MONSANTO CHEMICALS

Rapin Retires from Chiris

Louis Rapin, associated with Antoine Chiris Company Inc., of New York, since 1924 and with Antoine Chiris a total of forty-two years, retired at the close of 1945.

LOUIS RAPIN

He worked for Antoine Chiris in France in a sales capacity and then after serving as a captain in the French Army during World War I, he began to make periodic trips to the United States and in 1921 joined the American company.

Mr. Rapin planned a trip to France soon after the first of the year to visit with relatives. He will return to this country for a time to help his successor familiarize himself with details.

Frederick Shoninger who has been in charge of Anotine Chiris Ltd., London, will succeed Mr. Rapin with the American company.

Brass Goods Moves to Conn.

The Brass Goods Manufacturing Co., Brooklyn, N. Y., has sold its Brooklyn plant and purchased a modern, one-story concrete building in Deep River, Conn.

The company will also maintain an office in New York.

Johnson Directs Corday and Quinlan Sales

Harry T. Johnson has been appointed director of sales for Parfums Corday and Kathleen Mary Quinlan, New York. He recently resigned as vice-president and general manager of Delettrez, Inc. Before that, he was general manager of Elizabeth Arden and piror to that general manager and a member of the board of directors of Helena Rubinstein.

Edward Puzey Morrish has been appointed director of production, control and research for Kathleen Mary Quinlan. He was formerly with American Home Products Corp. and before that was chief, Cosmetic Division, O.P.A.

Dr. Parsons Retires from A. C. S.

Dr. Charles Lathrop Parsons, secretary of the American Chemical Society since 1907 and its business manager since 1931, retired from both offices December 31. Dr. Parsons, who is seventy-eight years old, will continue to serve the society for he was elected to the board of directors for 1946.

Woulfe—Pepsodent General Mgr.

Henry F. Woulfe has been elcted vice-president and general manager of the Pepsodent Division of Lever Brothers Co., it has been announced by Charles Luckman, president of the division. In this capacity, Mr. Woulfe will succeed Mr. Luckman as operating head of the Pepsodent Division whose headquarters are in Chicago.

HENRY F. WOULFE

Mr. Woulfe, a native of Chicago and a graduate (B.S., 1922) of the Commerce School of the University of Illinois, has been with Pepsodent since early in 1927 when he started as purchasing agent. In 1938 he took over plant operations, production and planning, and later became production manager. In 1943 he was appointed vice-president in charge of production. He served in the Navy in the first World War.

Dugas Named Assistant to Canaday

Durel A. Dugas has been appointed assistant to W. D. Canaday, vice-president in charge of distribution and advertising of Lentheric, Inc., New York.

Anable Rejoins Dorr Co.

Lieutenant Commander Anthony Anable, U. S. Naval Reserve, rejoined the Dorr Co., New York, January 1 as director of public relations and advertising. He has been on military leave from the Dorr Co. since shortly after Pearl Harbor.

McNaull Advanced by Owens

Robert D. McNaull has been made manager of the Prescription Ware Division of Owens-Illinois Glass Co., Toledo. He joined the division in March 1937 and served in various sales

ROBERT D. McNAULL

capacities before joining the U. S. Navy in April, 1941.

Mr. McNaull succeeds Lt. C. J. Kiger, former manager of the Prescription Ware Division, who is on leave and currently serving in the U. S. Navy.

E. J. Walker, assistant manager of the division, who, in Lt. Kiger's absence has served as acting manager, will continue in his former duties as assistant manager.

Dr. Joseph Heads Bri-Test Research

The development division of Bri-Test Products Corp., 109 Avenue L., Newark, N. J., has been reorganized and Dr. S. Brian Joseph has been appointed director of research, it has been announced by Louis Gould, president.

Dr. Althausen Joins Fritzsche

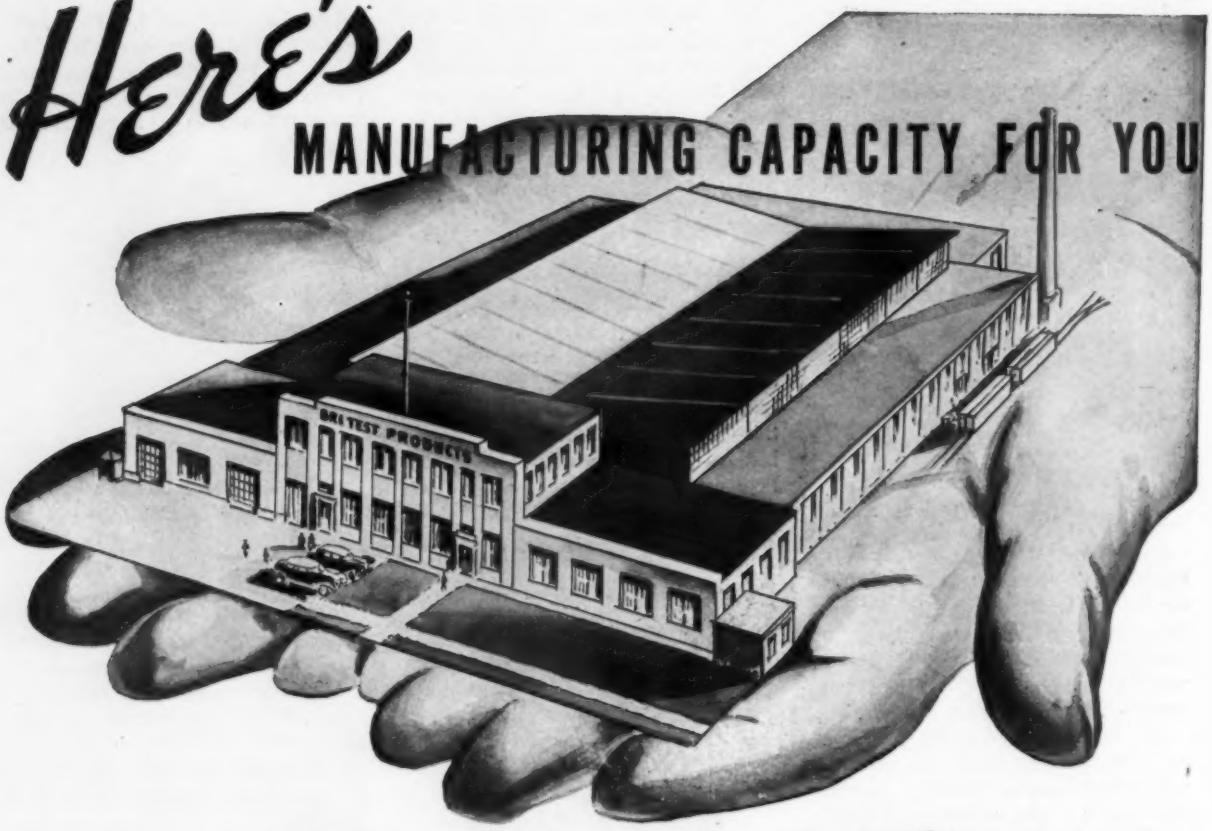
Dr. Darrell Althausen has been added to the staff of Fritzsche Brothers Inc. He will head the company's new products department with offices and laboratories in the Clifton, N. J., plant.

Until recently, Dr. Althausen served as a major in the Chemical Warfare Service and in the Subsistence Research and Development Division of the U. S. Army Quartermaster Corps.

Thurston Merrell Jr. Weds

Ensign Thurston Merrell, Jr. was married to Virginia Hammitt of Vancouver, B.C., in Jacksonville, Fla., where he was stationed. Ensign Merrell, who is the son of Thurston Merrell, president of the Wm. S. Merrell Co., has since been released from active service and has returned to Cincinnati with his bride.

Here's MANUFACTURING CAPACITY FOR YOU



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The postwar home of Bri-Test Products, 109 Avenue L, Newark, N. J., is ready for capacity production. Our new plant, last word in modern production efficiency, offers 75,000 square feet of the best, up-to-the-minute equipment and facilities for the manufacture of soaps, cleaners, waxes, liquids, etc.

If you have a specialties production problem, Bri-Test's new plant has the solution for you. If it's a technical problem, Bri-Test's development division can answer it.

Laboratory-controlled quality has been synonym for Bri-Test Products for years. Now, that same quality is available in even greater quantities. Yes, Bri-Test makes it in bulk, package or private label. Manufacture and packaging of private formula products is our specialty.

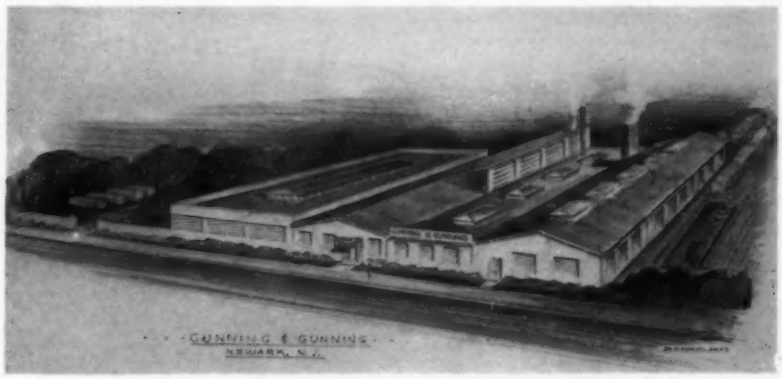
Write today to Dept. D, Bri-Test Products Corp., 109 Avenue., L, Newark, N. J., for full information on how Bri-Test can solve your technical and production specialty problems.

CONCENTRATED LIQUID SOAP SHAMPOO • LIQUID HAND SOAP IN ALL CONCENTRATIONS • LIQUID OIL SCRUB SOAP • NO-RUBBING FLOOR WAX (INDUSTRIAL HEAVY DUTY) • CLEANERS LIQUIDS AND POLISHES

Bri-Test PRODUCTS CORPORATION

MANUFACTURERS AND PACKERS OF SOAPS, SHAMPOOS, WAXES, POLISHES AND CLEANERS

109 AVENUE L, NEWARK, N. J.



New plant purchased by Gunning & Gunning in Newark, N. J.

Gunning & Gunning Buys Newark Plant

Because of the necessity of increasing its production facilities, Gunning & Gunning has purchased a plant in Newark, N. J. where additional up-to-date equipment has been installed for the production of aromatic chemicals and perfume compounds. The company's manufacturing operations are being moved to Newark soon after the first of the year but the company's offices are being maintained at 601 West 26 St., New York.

The company is preparing an elaborate illustrated catalogue of all its products. Copies of the catalogue, ready for distribution in January, are available upon request.

Shoninger Returns from France

Frederick E. Shoninger, president of Antoine Chiris Co., Inc., New York, who has returned from a lengthy trip to England and France, has announced that Albert V. Henissart is making an inspection tour of the company's agencies in Mexico, the West Indies, Central America, Venezuela and Colombia. Mr. Henissart has been in charge of the Chiris activities in Latin America for a number of years.

McKay-Davis Completes New Plant

McKay-Davis Co., Toledo, has announced the completion of its new pharmaceutical manufacturing plant. Modern in design and layout it is completely air-conditioned with automatic humidity control and a high level of lighting that provides daylight see-ability twenty-four hours a day.

The research and development laboratories are under the direction of Henry E. Melton, vice-president in charge of the technical division, and Dr. Oliver F. Senn, director of research.

Agencies Wanted in Africa

Jey's Products, 16 Bezuidonhout St., Troyeville, Johannesburg, South Africa, is interested in getting from American firms lines which it could manufacture under license in South Africa.

The company is equipped to manufacture perfumery and cosmetics, medicinal and pharmaceutical preparations, inks, glues, and beverages and kindred lines in its factory, Alfin House.

Raisley Rejoins van Ameringen

Willard A. Raisley, recently returned from service as Lieutenant U. S. Navy, has rejoined the van-Ameringen-Haebler organization as a member of the sales staff. He was active in the company from 1937 until he volunteered for naval service in 1942. He is one of the first of the company's fifty-five service men to return. Before the war he was sales representative in the Philadelphia area and will now be attached to the van-Ameringen-Haebler Chicago office.

Fiore Returns from Brazil

A. T. Fiore, research chemist of Givaudan-Delawanna, Inc., has returned from a trip to Brazil where he studied the essential oil production in that country. He traveled through the state of Sao Paulo, and visited the most important plantations and essential oil producing factories, studying the production of mint oil, vetivert, patchouli, eucalyptus, citriodora and other eucalyptus varieties. He also investigated Brazilian wood oils, particularly rosewood, the so-called Brazilian sassafras (ocotea), and cabriuva.

Joseph L. Rosin receives the 1945 Remington Medal from Dr. Curt P. Wimmer of the Columbia University College of Pharmacy at a dinner at the Hotel Pennsylvania, New York.

Modernize with Compact ALSOP FILTERS *. . . and be ready for the Big Push*

In the scramble for more production you need faster and better filtration and if you can get it with less labor and lower production costs, so much the better. Well, Alsop "Sealed-Disc" Filters will do all that and more too.

In addition to its filtering efficiency the "Sealed-Disc" Filter offers these values to its users.

1—completely enclosed, air-tight unit, eliminating loss through leakage or even by evaporation.

2—exceptionally small space requirement coupled with amazingly high capacity and filtering speed.

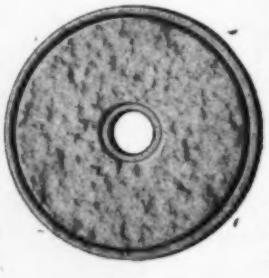
3—because of the simplicity of design, these Filters are available made of ***Stainless Steel, Monel Metal,*** and other acid and alkaline resisting materials at ***extremely low cost.***

4—filter discs easily changed when clogged with dirt or when products handled are changed. A very few minutes does the job.

5—sizes, with or without pumps, range from 1 GPM to thousands of gallons per hour.

If you have any filtration or re-filtration problem, investigate the Alsop "Sealed-Disc" Filter. It has much to offer you.

THE SECRET OF SUCCESS



This unique filter disc material used in Alsop "Sealed-Disc" Filter guarantees clean, clear, sediment-free solution. The "Layer-on-Layer" construction stops the solids, even those high on the micron scale.

Discs can be cut to fit any filter or the material can be purchased in sheets.

Available for inspection at our booth at the Chemical show—Nos. 321-322.

In writing for Catalog No. 144 give complete information about your liquids, quantities, etc.

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Firmenich Celebrates 50th Anniversary

Firmenich & Cie, Swiss producer of the Chuit, Naef line of perfume specialties and aromatic chemicals, celebrated its 50th anniversary at its headquarters in Geneva, and at the 80 offices of the company throughout the world. The firm is represented in the United States by Firmenich & Co., New York,

ANDRE FIRMENICH

which also maintains a branch office in Chicago.

Originally known as Chuit, Naef & Cie., the company was organized by Dr. Philip Chuit and Martin Naef in 1895. Dr. Chuit's initial undertaking in the field of aromatic chemistry was the manufacture of vanillin and the development of odor-pure Ionones. Much of his early work centered on the development of geraniols and such specialties as Heliotropol, Florentiol and Violet bodies. He created Dianthine in 1902 and a year later discovered an original process for Iralia. Civettine and Grisambrene appeared on the world markets just before the turn of the century and the Naef synthesis of the oils of Neroli and Jasmin were created shortly thereafter. The constitution of Cyclosis Base was one of Dr. Chuit's greatest contributions to aromatic chemical science. Dr. Chuit died in 1939. His nephew, Dr. Roger Firmenich took over the direction of the laboratory from him and now heads the technical and research facilities of the company.

RUPERT C. WATSON

Fred Firmenich, who had married Dr. Chuit's sister, joined the firm in 1900 and directed the commercial development of the company until his retirement in 1943. It was under his guidance that the Swiss specialties were introduced to the markets in Europe and America. The affairs of the company are now directed by his brother, Hugo Firmenich, and Fred's sons, Andre and Roger as well as Hugo's sons Robert, Albert and Dr. Georges Firmenich. The latter is assistant in technical matters to his cousin, Dr. Roger Firmenich. Andre Firmenich is well known in this country having visited here annually for several years prior to the war.

Many of the outstanding developments in recent years have been conceived by Dr. Leopold Ruzicka who joined the Swiss firm after World War I. The synthesis of Nerolidol and Farnesol in 1922 were among the early results of his research, prefacing his widely known work on Musk and Civet and his conception of Exaltolide which brought him the Nobel prize in chemistry in 1939. In more recent years the company has conceived and developed such products as Wardia, Parmantheme, Balsamol, Jasmanthia, Ysminia, etc.

Throughout World War II Firmenich & Cie maintained a constant research program and in 1946 plans to offer Alphacivettone, a new synthetic body that is claimed to be identical in performance with natural Civettone.

Firmenich affairs in the United States are directed by Rupert C. Watson, a partner of the company, who has been associated with the Chuit, Naef line practically since its introduction in the United States. The company's compounding laboratories in New York are under the direction of Dr. A. T. Frascati.

Jugeat Heads LeLong Exports

Jacques Jugeat, who has been associated with the Lucien Lelong organization for many years has been elected vice-president in charge of export business. He will continue to make his headquarters at the company's New York office.

Givaudanian Index

Having completed twelve years of uninterrupted publication of its house organ, "The Givaudanian," Givaudan-Delawanna, Inc., has published a cumulative index which is available upon request.

William R. Warner Appointments

G. J. Straub has been appointed manager of the Biological Control Laboratories of William R. Warner & Co., Inc. He was recently released from the Army after serving for four years as a Captain in the Sanitary Division. Prior to joining the armed forces he was with Central Research Laboratories and the General Foods Corp.

G. J. STRAUB

E. M. Tarplin has been named to head the company's Professional Service Department. A graduate of Massachusetts Institute of Technology, he was formerly an associate director of sales education of Wyeth, Inc., Philadelphia.

Manfred J. Haas has been made project engineer on the development staff of the Sterisol Division. He was recently released from the U. S. Army where he served with the rank of Lieut. Colonel as chief of the Wheeled Vehicles Section. A chemical engineer, Mr. Haas was connected with the pharmaceutical production staff in the Sterisol Division of William R. Warner & Co., Inc. prior to entering the army.

E. M. TARPLIN

Wiley F. Patton has been appointed head of the Statistical Department. His experience was acquired during his employment with the War Food Administration and later as market research director for the Whitehall Pharmacal Co.

Fred H. Leonhardt Joins Fritzsche

Following his release from the Army after three and a half years of service, Fred H. Leonhardt has joined Fritzsche Brothers, Inc. of which his father, F. H. Leonhardt, is president.

FRED H. LEONHARDT

In July 1942 he discontinued his studies at Dickenson College and joined the Cavalry, later being transferred to the 83rd Tank Destroyer Battalion.

Shoemaker Joins Rorer

William H. Rorer, Inc., pharmaceutical chemists, Philadelphia, have appointed William Guy Shoemaker, 2nd, to their staff. Mr. Shoemaker, a graduate of Philadelphia College of Pharmacy and Science, has for the past three years been chief pharmacist at the Woman's Medical College Hospital, Philadelphia, and has taught in the college as well.

Sloan Joins Rene Forster

Frank H. Sloan who has received his discharge from the Army Air Force has joined Rene Forster Co., New York, in a sales capacity. Before the war Mr. Sloan was associated with Naugatuck Aromatics.

Schwarz Starts Consulting Business

J. Casper Schwarz has announced that he has resigned his position as assistant superintendent of Lambert Pharmacal Co. to offer his services as a consultant to the cosmetic, perfume and allied trades.

Frost Joins Bristol-Myers

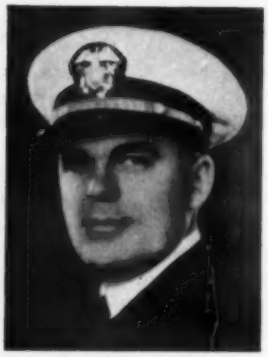
Donald S. Frost has been appointed assistant director of advertising and market research of Bristol-Myers Co., New York. He comes to Bristol-Myers after three and one-half years in the Navy, from which he was recently discharged with the rank of lieutenant, having seen service in both the Atlantic and Pacific theaters.

Piver Sales Reorganized

L. T. Piver, Inc. is being reorganized to provide an aggressive sales and merchandise division according to an announcement by R. E. Hankar, president. The new company, L. T. Piver Distributors, Inc., will maintain sales offices at 902 Broadway, New York. New modern packages are being designed, the original prewar essences and perfumes will be imported from the Paris branch and operations are expected to begin about May 1, 1946.

Penick Appoints Thawley in Phila.

S. B. Penick & Co., New York, producers and manufacturers of botanical drugs and medicinal chemicals, has appointed William A. Thawley, sales representative, for Pennsylvania, Maryland, Delaware and the District of



WILLIAM A. THAWLEY

Columbia. Mr. Thawley is a licensed pharmacist, a graduate of the Philadelphia College of Pharmacy and Science. For the last two and a half years he has been on active duty with the United States Navy, as a lieutenant in command of a P.T. boat.

Leube Managing Mark Cross Toiletries

R. P. Leube has been appointed vice-president and general manager of Mark Cross Toiletries for Men. Until new quarters are completed, the new company's office will be in the Mark Cross Building at 655 Fifth Avenue, New York.

M. M. & R. Sales Conference

Magnus, Mabee & Reynard, Inc. held its first all-inclusive sales conference in four years at the Hotel Warwick in New York, January 4, 5 and 6. Members of the sales staff from all over the country, executives and representatives from Mexico, Cuba and Canada were present.

Humphrey D. Brock

Humphrey D. Brock, a partner in the Brunswick Tablet Co., Chicago, died suddenly at his home December 19. He was sixty-nine years old.

Mr. Brock was born in Logansport, Indiana and received his Ph.G. degree at Northwestern University in 1898.

Isaac Manheimer

Isaac Manheimer, vice-president of J. Manheimer, essential oils, New York, died December 10 at the age of seventy-one.

Mr. Manheimer had been active in the company since he joined it at the age of nineteen. In recent years he was in charge of the southern territory for the company. He was a member of the Essential Oil Association and of the Vanilla Bean Association.

Francis J. McHugh

Francis J. McHugh, executive vice-president of the New York Quinine & Chemical Works, Brooklyn, died December 13, following an emergency appendectomy at the Midwood Hospital, Brooklyn. He was thirty-seven years old.

Mr. McHugh had been associated with the New York Quinine and Chemical Works since 1926, the year that he was graduated from the Brooklyn Preparatory School. He was made assistant secretary of the company in 1942 and executive vice-president in 1944.

He was a member of the Chemists' Club of New York, the Drug & Chemical Club of New York, and was a member of the executive committee of the Salesmen's Association of the American Chemical Industry.

James Sharp

James Sharp, president of the Eastern Viavi Co., died in Washington, December 2. He was eighty-eight years old.

His son, Dr. George T. Sharp, who has been associated with him in business for some time will carry on the business of the Eastern Viavi Co.

Two Fritzsche Veterans Die

Fritzsche Brothers, Inc., New York, has announced the death of two members of its Quarter of a Century Club. Robert Waugh, who joined the firm in 1898 and was in the company's technical department, died at his home December 2. Two days later, on December 4, Emil Muller, manager of production in New York, died suddenly at his home in Great Neck, L. I.

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No contamination of the contents of tanks used in your processes will occur when you install "Pittsburgh" GLASS TANKS. Your maximum sanitation requirements are met, for glass tanks are stainless, non-porous, non-absorptive and impervious. Available in opaque or transparent glass.

Full resistance to sharp temperature changes is secured with "Pittsburgh" Tanks, due to the specially tempered, tough glass of which they are made.

Transparent glass enables processes and tank contents to be watched and checked with ease.

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HORM ASBESTOS FILTER PADS

HORM Asbestos Filter Pads are the product of carefully controlled manufacturing processes. Starting with the initial steps of raw material processing through to final inspection, scientific laboratory control methods and equipment are employed, with the result that consistent performance is provided by the end product.

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The wide range of porosity available permits our laboratory service to select the grade providing the lowest operating cost consistent with the desired retention.

Horm Asbestos Filter Pads are available for all filter designs.

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F. R. HORMANN & CO., Inc.
127 Boerum Place, Brooklyn 2, N. Y.

We've been doing this for more than 30 years

Holding down costs is more essential today than ever... And a good place to start looking for new economies is in your packaging department... We know this, because we've been instrumental in lowering packaging costs for more than 30 years.

You may still be using hand-wrapping for products that could be wrapped by machine... Or you may be using semi-automatic machines that could be replaced by fully-automatic types, thus enabling you to save time and labor... And don't forget that our latest fully-automatic models have far greater speed than those formerly available.

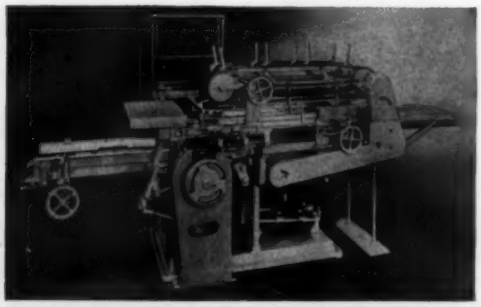
These modern machines are, moreover, easier to supervise and maintain. They are compact in design, occupy the minimum of floor space, and are more economical in their use of wrapping material. In many cases material may be used in roll form, even when printed, thereby making large savings on the cost of cut-to-size sheets. And because they're extremely quiet, smooth-running and free from harsh vibration, the possibility of breakdowns is minimized and longer life assured.

The great diversity of products wrapped by our machines is proof that these machines have what it takes to provide wrapping that keeps sales up and packaging costs down.

Why not check your present methods now? We'll be glad to give you our recommendations. Just drop us a line, or phone our nearest office.

Today we can offer you faster and more efficient wrapping machines than ever

for example



The New Model FA — This machine is suited to a wide variety of products. It has a speed of 100 packages per minute, and speed can be regulated by a single hand-wheel. Will wrap goods in open boats, flat objects on a card, as well as cartons. Quickly adjustable for various sizes. Adaptable to practically any type of wrapping material.

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101 W. Prospect Ave., Cleveland 15 • 443 San Pedro St., Los Angeles 13
18 Dickens Ave., Toronto 8

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

Production Forum

By Francis Chilson

Industrial Consultant

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Compression Distillation

Low fuel consumption in distillation has been made possible by the wartime development of the Kleinschmidt compression method. By this method, which essentially involves distillation by application of mechanical energy instead of external heat, an average of at least 175 pounds of distilled water may be obtained for each pound of fuel consumed; this ratio is three to four times greater than can be obtained with efficient conventional systems using fuel to generate heat. Although the compression principle has been known in theory for many years, it was first develcped to the point of large scale use during World War II for the United states armed services.

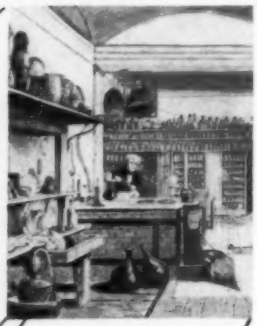
After several years of wartime secrecy, the principles of this method were described on November 27, by Allen Latham, Jr., of Arthur D. Little, Inc., Cambridge, Mass., in a paper presented at the annual meeting cf the American Society of Mechanical Engineers in New York. The Kleinschmidt compression distillation system was originally developed in the laboratories of Arthur D. Little, Inc., by a group headed by Dr. Rcbert V. Kleinschmidt, Commodore Kleinschmidt, U.S.N.R., who rejoined Arthur D. Little, Inc., December 1. Mr. Latham, author of the ASME paper, has directed wartime development of the system by Arthur D. Little, Inc., and its modification to fit a variety of practical needs. Devices and methods used in the system are covered by a number of U. S. and foreign patents and patent applications assigned to Arthur D. Little, Inc.

During the war, E. B. Badger & Sons Co. of Boston, Mass., manufactured, under license from Arthur D. Little, Inc., Kleinschmidt stills for the U. S. armed forces. Many thousands of these stills were used aboard Naval vessels—submarines, destroyer escorts and landing craft—to supply pure water from seawater. On land, several thousand gasoline engine-driven, portable units were used with great effectiveness, especially in the South Pacific, to supply our fighting men with water for drinking and other purposes where the sea was the only readily available source of water. By the end of the war there was enough Kleinschmidt compression distillation equipment in service to produce pure distilled water for the daily needs of over a million men.

The value of this source of water to our forces is well indicated in Stf. Sgt. Jack Vincent's article in the October *Marine Corps Gazette* entitled, "Water on Iwo," quoted in part, ". . . Iwo was probably the most barren island ever invaded by such a large American force. There were no streams, and the few hot sulphur springs gave up water too brackish to drink . . . . The Iwo Japs depended on rainfall for most, if not all, of their water . . . . Reports that the Japs were desperate for water began reaching American lines as early as D + 10 . . . . *The Japs has nothing comparable to our mobile waterworks* . . . . " In Naval vessels, too, the high fuel economy of Kleinschmidt compression stills permitted many craft to make their water as needed rather than carry it as cargo, thus releasing space for fighting equipment and in some instances extending the vessels' cruising range markedly.

Compression distillation depends upon mechanically compressing the steam or other vapor leaving the evaporation compartment of the still. This compression raises the temperature of the steam a few degrees. At the higher pressure, the steam condenses at a temperature somewhat higher than the boiling point of the evaporating raw water, so that heat can flow from the condensing steam to the raw water and boil it. In engineering terms, the condensing vapor is used to supply heat inside the steam chest of the still in place of steam from sources outside the unit. Efficient provision for reducing heat loss to the atmosphere and recovering heat from the distillate and the concentrate carrying out waste as they cool down to room temperature com-

Late nineteenth century medical laboratory.



PARTNER IN PROGRESS

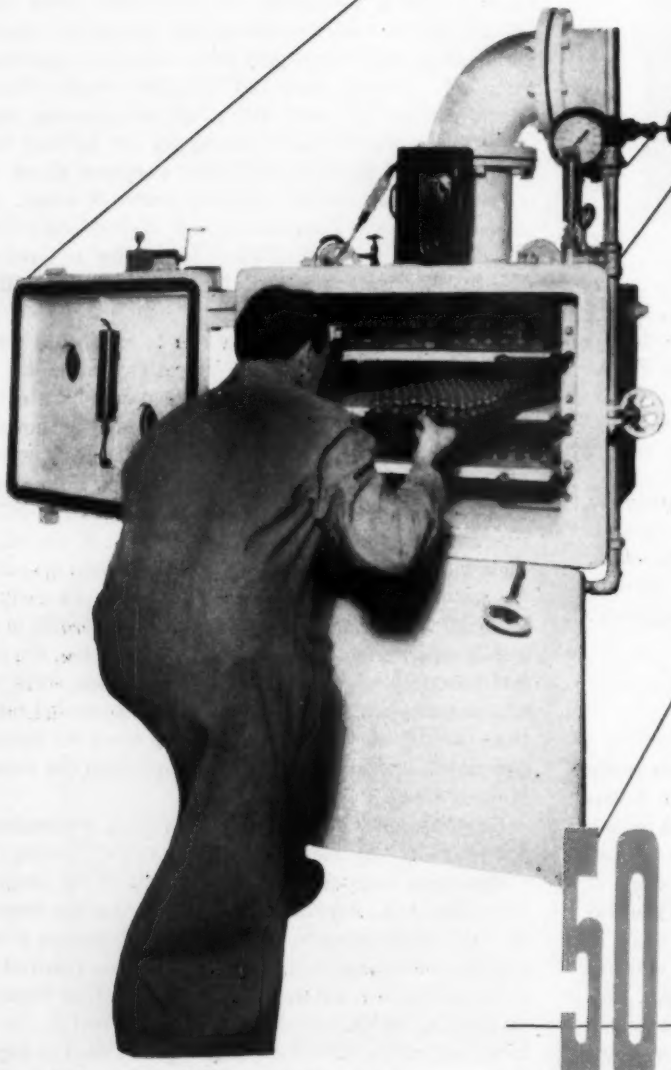
Scientific and medical advances have helped build a better world. Stokes is privileged to have aided that progress in several ways . . . through pioneering the production of successful tablet machines, building stills for the distillation of pyrogen-free water, and developing the high vacuum technique and equipment for Desiccation from the Frozen State.

Over the past 50 years we have worked with outstanding scientists and leaders in the pharmaceutical field, perfecting processes, and designing and building equipment not only to further research, but also to project laboratory methods into plant scale operations.

The blood plasma and penicillin drying programs were made possible by the Stokes' Freeze-Drying method. This process is being further applied to the production of streptomycin, glandular extracts, vitamin specialties and labile biologicals.

Our half century's experience includes a wealth of fundamental research and field knowledge. We invite you to use it along with our laboratory, engineering and manufacturing facilities.

F. J. STOKES MACHINE COMPANY
5932 Tabor Road **Philadelphia 20, Pa.**



Stokes Freeze-Drying Chambers for Desiccation from the Frozen State under High Vacuum.

50 YEARS
of Service to Industry
F. J. STOKES

EST. 1895

pletes the system. No separate condenser or cooling water is needed. The overall fuel economy of the most recent Kleinschmidt compression stills—averaging at least 175 pounds of distillate for each pound of fuel consumed—is believed to be the highest of any self-contained system of evaporation.

After a compression still and its contents have come to operating temperature and the evaporation is filled with steam, the still may be turned on stream for continuous operation. In normal operation, for the production of fresh water from sea water, for example, the feed enters by way of a triple passage heat exchanger which heats the feed by extracting heat from both the outgoing distilled water and from the brine concentrate which carries out the solids of the sea water in a concentrated solution. The feed at about 207° F. is then introduced to the evaporator, where it mixes in a relatively large volume of brine which circulates naturally through vertical tubes. Steam from this boiling brine at, or slightly above, atmospheric pressure is led from the evaporation space through an entrainment separator to the compressor, which raises the pressure to about 3 lbs. per sq. in. gauge, thus raising the temperature at which it condenses to about 222° F. Since the brine in the evaporation space boils at 213° F., there is a temperature differential of about 90° F. between the compressed steam and the boiling brine to permit transfer of heat from the former to the latter. Substantially all the latent heat, which is the heat given up by the compressed steam upon its condensation to water, is used in maintaining the necessary temperature level for continuous boiling in the evaporation space; thus no separate condenser or cooling water is required.

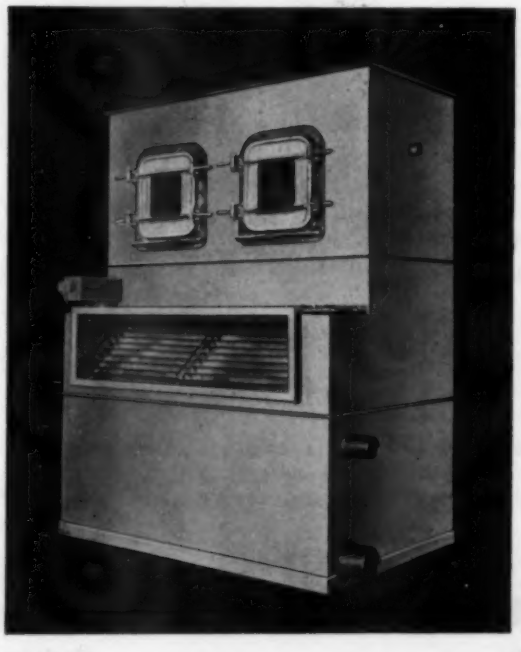
With a compression distillation unit of 1000 gallons-per-day capacity, the production of one pound of distilled water requires about 20 watt-hours or 68 BTU's energy input. A conventional single-effect evaporator requires about 300 watt-hours or 1020 BTU's per pound of distilled water. In multiple-effect evaporators the steam evaporating from the first "effect" is used, on condensing, to supply heat for the second effect and so on, up to three and occasionally four effects. The Kleinschmidt compression distillation system as applied to sea water distillation uses only one-fifteenth the energy of the single-effect evaporator and thus has an economy equivalent to some 15 or more effects, far more than could be practically operated. A compression distillation unit is far more simple to operate than a multiple-effect unit. The connections, heat transfer apparatus and controls are as simple as those on a single-effect evaporator. Ordinarily, control of the operation is made solely through adjustment of the flow of feed.

Compression distillation is now sufficiently advanced to justify its recognition as a major contribution to the techniques of distillation and evaporation. The Kleinschmidt still, by virtue of its low fuel consumption and its simplicity, shows promise in industrial applications of distillation and evaporation, both of water and other materials. With the wartime needs satisfied, the Kleinschmidt Still will be manufactured under license for sale to industry.

Kathabar Unit Air Conditioning

In addition to present units, a vertical contactor of heavy duty construction is offered in the new Kathabar unit now being announced by Surface Combustion Corporation, Toledo 1, Ohio. This unit has been developed especially for larger industrial applications where close control of humidity is necessary to maintain product quality and to insure continuous production.

Kathabar systems provide a reliable means of dehumidifying the air independently of temperature for processing operations and for personal comfort. Due to its high efficiency, it is especially useful where low dew point air is required. Because of the mechanical simplicity of the unit and accuracy of control of air



Which of these Packages, in your opinion, will Roll Faster to your customer?

FROM ACTUAL PHOTOGRAPHS, AT A DISTANCE OF 3 FEET

These are three commonly used methods of marking packages—stenciling, labeling and hand-marking—common carriers, such as the railroads, truckers and Railway Express, *recommend stenciling.*

Why take a chance—rain and damp weather obliterate type or hand written labels—avoid hand addressed mistakes—illegibility—labels coming off—lost shipments—delayed shipments.

Stencil address your shipments to keep your packages out of the carriers' *Lost Shipment Warehouse.*

Stenciled Shipments Roll Faster

THE WORLD'S OLDEST AND LARGEST MANUFACTURER OF STENCIL CUTTING MACHINES

D.B. REG U S PAT OFF

DIAGRAPH-BRADLEY
STENCIL MACHINE CORPORATION
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DISTRIBUTORS IN PRINCIPAL CITIES—SEE CLASSIFIED SECTION—TELEPHONE DIRECTORY—STENCIL CUTTING MACHINES

OVER 100 D-B ITEMS FOR THE SHIPPING ROOM

moisture this unit is the choice of industrial air conditioning engineers who must maintain an ideal atmospheric condition.

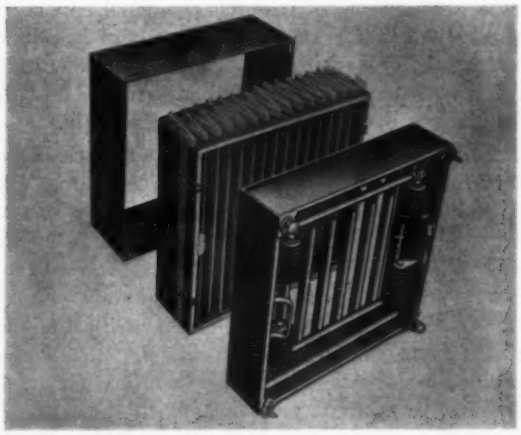
Units are already in operation in the manufacturing of glass, matches, photographic film, pharmaceuticals, foods and other processing operations requiring "controlled humidity" atmospheres in quantities from 10,000 c.f.m. to 70,000 c.f.m. Smaller package units from 1350 c.f.m. to 5000 c.f.m. and large central systems are also available.

Some of these Kathabar processing operations provide conditioned air as low as 19° dew point, or about 6 per cent relative humidity at 90° Fahr. Kathabar units have been tested at dew points as low as 80° below zero.

Kathabar systems utilize an inherently continuous regenerative process, thereby eliminating cyclic operation common with drying agents. Thus, constant 365-day operation is practical.

Air Filter

The latest addition to the American Air Filter Company's line of electronic air filters is the Electro-Airmat in which the collector element is electrostatically charged Airmat paper. Introducing an entirely new principle in electronic air filtration, the arrestance rating of the Electro-Airmat, when tested by the discoloration method, is 90 per cent or better with atmospheric dust or smoke. This efficiency is obtained at the normal velocity of 35 f.p.m. through the Airmat media and the standard rating of 1,000 c.f.m. per standard-sized 24" x 24" unit. The filter weighs 40 per cent less than electronic filters having metal plate collectors and requires 30 per cent less floor area.



Airmat is American Air Filter's trade name for a cellulose product composed of a number of plies of porus, tissue-like sheets formed of short cellulose fibers in "jack-straw" arrangement. It is unlike any other filtering media. When an electrostatic charge is applied to Arimat, the plies tend to separate and each individual fiber becomes a collecting electrode which attracts and holds the dust and smoke particles. Airmat is also a highly efficient mechanical filtering media; thus, when the power is off for any reason it affords ample protection against the infiltration of dust due to "stack effects" in air conditioning systems.

Ease of installation and economy and convenience of maintenance are outstanding features of the Electro-Airmat. The full height ionizers reduce electrical losses due to fewer wire ends. The powder pack operates on a 110 volt 60 cycle single phase current. Total power consumption is approximately 220 watts at 110 volts inclucing transformer losses in the power pack, etc. When the Airmat paper has accumulated its dust load it is removed and replaced with clean material by means of turning a crank in a mechanical loader which automatically folds the paper into the serrated base section of the filter unit. Spare cells loaded with clean Airmat can be provided for convenience in servicing. For small installations requiring only a few units, a manual loader answers the purpose.

Code Dating Attachment

The Rolacoder No. 100 is a rotary code dating attachment for your conveyor, compression or sealing unit, to mark cases, drums or kegs automatically. The need for dating, control, or code numbering of cases is widely known. This is a unit that does it automatically.

The Rolacoder No. 100 will mark cases with an imprint on the side of a case and on a keg or drum with an impression on the lateral surface. The impressions may consist of numbers or letters on one line in a permanent ink. Type sizes are ¾". Slight variations in the location of the case on the conveyor are automatically adjusted for by the spring loading of the unit. The Rolacoder protrudes in the path of the case. When contact is made it gives way slightly and then rolls along the side of the case making an impression at the same time. With a small space between cases, the Rolacoder returns, or advances, to its starting position ready for the next case.

The Rolacoder No. 100 is heavily constructed. The type wheel is bronze and has a self-return. Its shaft turns in a needle bearing. The wheel has knurled bearer for driving it by friction and a machined channel to receive the manufacturer's flanged cushion type. Ink roller is made of solid felt and has an internal fountain which is refilled by ink from an oil can. Complete unit is supported on a bracket for easy mounting.

Rolacoder Outfit No. 100-A includes the unit ready for mounting on the average conveyor for marking cases, three sets of ¾" interchangeable numerals, 1 to 0, and one pint of permanent black ink. Outfit is most reasonably priced. Shipments are being made quickly. For marking words and for locating marks on ends, sides, top and bottom of case special Rolacoders are made.

Other Rolacoders, No. 200 for trade-marking sheet material and No. 300 for code dating the sides or tops of cans, are available.

Development of Pharmaceutical Specialties

(Continued from page 39)

to allocate for research will naturally vary with companies. Generally the smaller the company, the greater the proportion of its income which may be required for research activities. In many cases, however, research expenditures may appear high because much that is essentially control work is classed as research. An adequate research outlay for pharmaceutical manufactures has been variously estimated at from 2 to 10% of gross income. It is up to top management in each case to determine the most it can afford to spend to maintain its competitive position and ultimately expand its business. The amount decided upon will in all probability be none too much.

Organization Of The Research Department

Size: Obviously the size of a research department will vary with the size of the company and with the proportion of income which can be allocated to research.

Personnel: The selection of personnel for a research department requires very careful consideration. Management's chief responsibility is in the selection of the director, who then should be allowed a reasonable degree of freedom in picking those to work under him. The director of research should have a broad training in those sciences—chemistry, biology and medicine—which bear most directly on the industry. He should possess a sense of economic values and be generally well aquainted with what is going on in the field in which the company is interested. While scientific and technical knowledge is an important requirement of the executive in charge of research, perhaps more important is his ability to handle men. On this depends in large measure the efficiency with which a research laboratory operates. In most instances new products result from group rather than individual efforts. Accordingly, teamwork amongst the members of a research department is essential for success. Effective teamwork will depend on the enthusiasm with which the men pull together for the development and improvement of all under the leadership of the research director. Hence he must inspire confidence and loyalty, be the nucleus around which develops that subtle quality characterizing winning teams—an "esprit de corps". In addition he should contact people easily, and should make it a practice to discuss problems periodically with others both within and without the organization, for such discussions are often a fertile source of ideas. Also he must be a salesman, capable of getting management's approval for necessary or worthwhile research expenditures. This is a large order indeed, but the closer the man selected meets these requirements, the greater the assurance of success in the research program undertaken by the company.

Perhaps the two most important requisites for staff members of a research department are good fundamental training and adaptability. For large organizations specialization in some branch of science may be necessary, but for small and medium-sized companies this is not essential and probably undesirable.

As research departments grow, subdivision becomes necessary. There may be sections or divisions devoted to studies in a special field and these may be further divided into groups. Each of these subdivisions should be headed by a leader, the group leaders being responsible to the section or division heads, who in turn are responsible to the research director.

The active head of research whether he be the research director or executive in charge of research & development should be a member of the management committee or an officer of the company so that research will be assured of forceful representation.

The handling of personnel deserves the most careful attention of management. Financial compensation must be adequate. Incentive plans should be instituted to reward good work, but in the execution of such plans care should be taken to avoid penalizing a worker whose assignment while not fruitful was nevertheless well carried out. When the size of the department permits, all members should probably share in the rewards so as to foster the spirit of teamwork. The desire to grow and develop should be recognized by management as a natural characteristic of most research men, and there should be opportunities for this within the company if interest is to be sustained. Some individuals will grow and develop in spite of all the obstacles management may place in front of them. Others may have to be helped. It would seem to be the part of good judgment for management to provide such assistance and encouragement when necessary or desirable. The enthusiasm and consequently the productivity of research personnel can be improved when it is evident that a spirit of helpfulness pervades the organization from top management right on down to the individual worker. All will feel that they are part of the team and act accordingly.

Facilities: Needless to say adequate facilities should be provided for the proper conduct of research. Without the necessary tools, personnel cannot function efficiently. The laboratory should be large enough, clean, orderly, well-lighted, and located away from excessive noise. It should be adequately equipped with modern apparatus. A library with the more important chemical, pharmaceutical, and medical journals is as essential as all other facilities. Experience has shown that those companies with the most progressive research facilities generally make the greatest strides.

Objectives Of Research Department

Once a properly staffed and equipped research laboratory has been set up its objectives and the scope of its activities should be sharply defined. The general objectives usually comprise the following:

(1) *Develop new products.* Very few products,

pharmaceutical specialties as well as other types, can be expected to retain their market position indefinitely unchanged. Hence a continuous search must be carried on for new products to replace the old—before they are displaced by competitors' products.

(2) *Improve existing products.* Oftentimes a product can be re-created and its life prolonged by an improvement.

(3) *Seek new applications for the company's products.* Even with medicinal products the field of application can frequently be widened.

(4) *Develop new and improved methods of production and control.* Obsolete manufacturing processes and inadequate control of quality can seriously jeopardize the success of a product by giving the more efficient competitor a definite advantage.

(5) *Furnish technical information and assistance to other departments of the company.* The production and sales departments particularly can benefit by frequent and regular contact with the research department.

(6) *Conduct fundamental investigations* to contribute to the accumulation of "scientific capital", the basic source of new products.

(7) *Publish papers.* Research workers frequently desire the opportunity to publish the results of their work in scientific journals to help establish a name and reputation for themselves in their field. The company will also benefit by a liberal policy in this respect for its prestige will be enhanced. Obviously the work must be of such a type and carried out in such a manner as to be worthy of publication.

New Product Development

Perhaps the most important single objective of the research department, at least for manufacturers of ethical pharmaceutical specialties, is to develop new products. "What's new?" is the question most detail men are confronted with when they step into a doctor's office, and the detail man looks to his company's research department for the answer. To be able to furnish an answer, the research department with the cooperation of management, sales and production must constantly and vigorously pursue a systematic course directed toward this objective. Too often, particularly in the smaller companies, so much of the department's time is diverted to problems unrelated to the development of new products, that this more important task is handled in a hit-and-miss fashion. Success then becomes largely a matter of luck—a weak foundation on which to build one of the most vital departments of a company. New product development can be placed and maintained on a sounder basis by approaching it as all major problems are approached. First a careful and thorough analysis of the problem is made, then it is separated into its component parts, and these are then arranged in their proper sequence for systematic attention. In the paragraphs which follow an attempt is made to outline a series of steps that may be taken in a methodical attack on the all important problem of new product development. Obviously, no hard and fast rules can be laid down for the conduct of research in all cases, but the principles underlying the procedure outlined should find general application although the steps themselves may vary.

Directions In Which New Product Development May Proceed

A classification of the possibilities is always a helpful way to begin a project. A clearer understanding is thereby gained of the problem, and this is half the solution. New products may result from studies to:

(1) Synthesize new chemicals for medicinal use.

(2) Investigate existing compounds and natural products for their possible therapeutic value.

(3) Isolate or concentrate agents of therapeutic value from natural products.

(4) Develop new and unique preparations comprising substances of established worth in medicine, such preparations supplying active medicinals in a vehicle or form to improve their efficacy, consumer acceptance and safety.

Which of the above-listed courses are followed will depend upon the size of the company and its research department, and also on management's decision regarding the latitude of its activities. Large companies will generally work simultaneously in all directions, the smaller companies in probably one or two.

(*To be continued*)

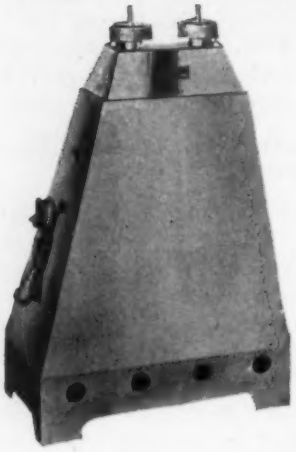
BLEACHING CREAM: May I ask your opinion on a bleaching cream containing zinc peroxide. Are there any cases reported on contact dermatitis due to zinc peroxide? I would deeply appreciate any information you might offer regarding bleach creams containing this material. New York City.

I would suggest that you read an article on zinc peroxide published in the November 1943 issue of DRUG AND COSMETIC INDUSTRY. From this I think you will get answers to your question concerning the action of zinc peroxide on the skin and other tissues. It will probably also answer a number of questions concerning the formulation of products containing zinc oxide. A standard bleach cream containing this material may be made along the following lines:

Glycerine	**43.0**
Petrolatum, soft white	**14.5**
Talc	**27.0**
Titanium dioxide	**6.0**
Zinc peroxide	**8.5**
Perfume	**1.0**

Heat the glycerine to 80° C. and stir in the melted stearic acid. Mix the talc, zinc peroxide and titanium dioxide and add to the above mixture and mix steadily until the paste is free from lumps. Then add the perfume.

COMPANION SEMI-AUTOMATIC MACHINES



E-Z Cleaner is a bottle cleaner for cleaning new glass. Machine uses compressed air and is furnished with Compressor and Motor. Easily connected to lighting circuit. Floor Space—27 x 14 in.

For Efficient Cleaning and Filling of Containers

These two machines will clean and fill 50 to 75 gross of containers per 8-hour day, depending upon size of containers and dexterity of operator.

They are both 2-Tube Machines and handle two containers at a time. Are portable and come furnished with cord and plug for attaching to lighting circuit. Both are fully automatic in operation except for placing and removing of containers by operator and require only ordinary skill for efficient operation. They serve efficiently not only for small producers, but in larger plants as well for use on special runs. The same carefulness in details and efficiency in construction is built into them, as is found in our larger fully automatic and high speed bottling machinery.

U. S. BOTTLERS
Machinery Co.
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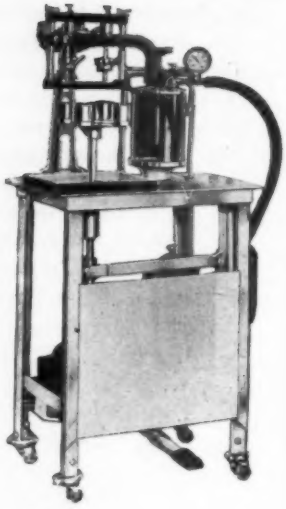
MANUFACTURERS OF
PUMPS
CAPPERS
FILTERS
CONVEYORS
WASHERS & DRYERS
WASHERS
CORKERS
FILLERS



Model B, Two-Tube Vacuum Filler. An ideal filler for filling from any tank, barrel, jar or 5-gallon bottle on floor. Floor Space required 30 x 18 inches.

Here's what you'll like about the new

...“HAGERTY HANDY FILLER”

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

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10 Platt Street **New York, N. Y.**
Est. 1849

Rx
PACKETS Perform
Brown Packeting will develop packets of your product into new sales. Drugs, or any product in free flowing form—powders, tablets, granules or crystals lend themselves to Brown Packeting—the packaging method which opens whole untouched markets. Send us a small quantity. We will packet it attractively and return it with complete details of how to packet economically.
BROWN
BAG FILLING MACHINE CO.
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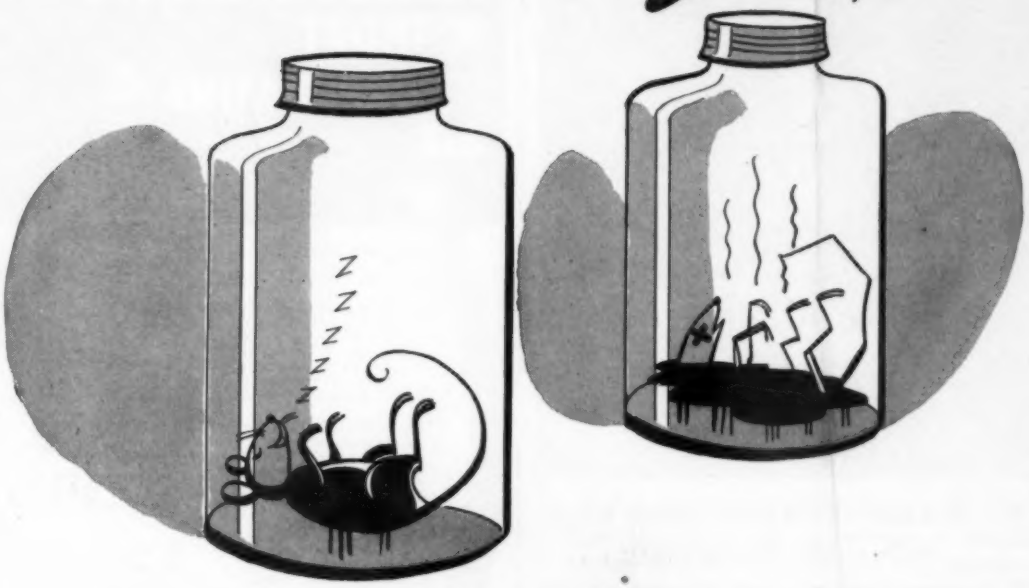
West Coast Reps., Peter D Bowley & Associates, 369 Fifth St., San Francisco, Cal.

LISTEN TO THE *Tale of 2 Mice*



It's a lesson on controlled humidities

Two mice, both dead six years, have been entombed all that time in individual glass jars. Moisture in the one jar has been held in equilibrium at 40° F. In the other, no attempt was made to control the humidity.

The mouse in the first jar still looks like a mouse. The other—well, the less said the better. But therein lies a moral.

If you wish to store materials without injury to quality or quantity, maintain the humidity surrounding them at definite low levels. There are Lectrodryers ready to help you do this automatically. Lectrodryer engineers will assist in selecting the proper machines and controls for the job.

For this help, get in touch with Pittsburgh Lectrodryer Corporation, 309 32nd Street, Pittsburgh 30, Pennsylvania.

In England: Birlec, Limited, Tyburn Road, Erdington, Birmingham.
In Australia: Birlec, Limited, 51 Parramatta Road, Glebe, Sydney.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

PITTSBURGH
LECTRODRYER
CORPORATION
Reg. U.S. Pat. Off.

EXACT WEIGHT Scale counting capsules for filling wholesale drug orders in the First Texas Chemical Company, Dallas, Texas.

Count Tablets and Capsules by Weighing . . .

Filling wholesale orders for tablets and capsules by actual count is a slow, expensive packaging operation. Counting by weight is cheaper, faster and accurate to less than 1%. The only hand count necessary is the number of units required for the first package, generally placed in the scoop at the left. For further packages simply add tablets and capsules in the right scoop until the indicator shows EXACT WEIGHT. The operation is simple, fast, inexpensive. Counting by weight cuts packaging costs to a minimum . . . increases volume materially per operator. Write for details and specifications for tablet and capsule operations.

EXACT WEIGHT Scale equipped with two open scoops. Expressly designed for tablet and capsule counting by weight. Scoops come in three sizes and can be ordered to fit the operation. Scale capacity is also subject to specifications for the counting task involved.

INDUSTRIAL PRECISION

Exact Weight Scales

THE EXACT WEIGHT SCALE COMPANY

950 West Fifth Avenue, Columbus 8, Ohio

Dept. AK, 783 Yonge St., Toronto, Canada

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

EPPENBACH, INC.

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EPPENBACH INC.

Processing Equipment for Over 30 Years

Why pay more

when you can *get more for less*

from Ever Ready

NOT just more labels per dollar, either, but time-saving, quicker-sticking, easier-handling roll labels. See! labor costs more than labels! ¶ It's "eye-appeal" that's "buy-appeal" you get in Ever Ready labels. After 32 years learning HOW, our label designs get quick action, compel attention,—do YOUR job!

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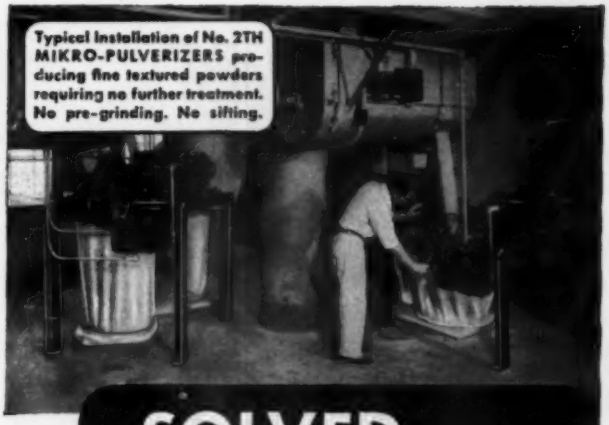
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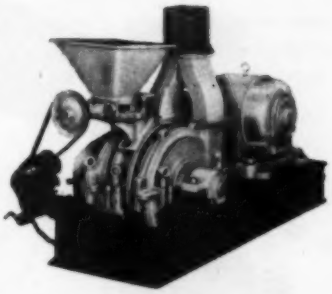

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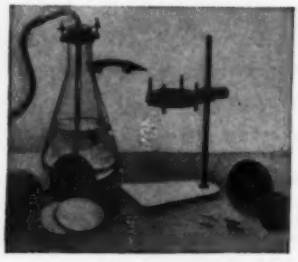

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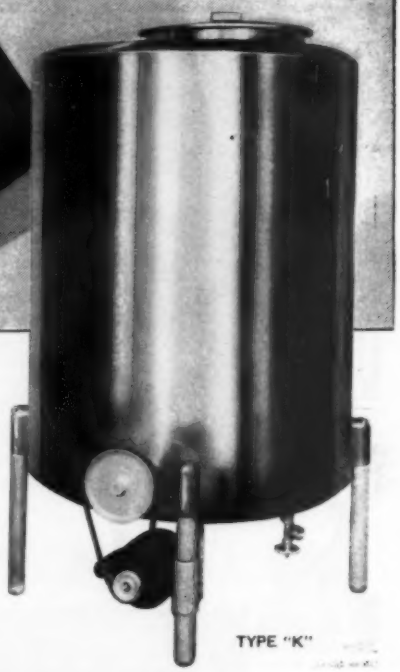

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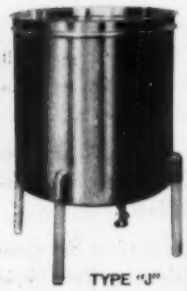

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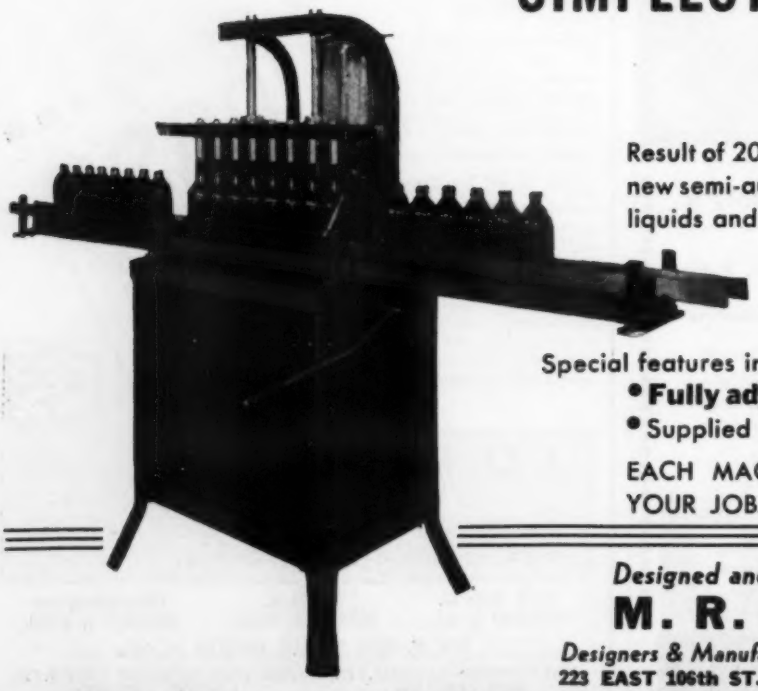

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Industry's Books

American Pharmacy, Editor-In-Chief Rufus A. Lyman, M.D., Dean, College of Pharmacy, University of Nebraska, 540 pp., illus., J. B. Lippincott Co., $8.

Part I of this work deals with the fundamental principles of the basic sciences as applied to pharmaceutical processes. Part II covers the field of pharmaceutical preparations with emphasis placed upon the processes involved in their manufacture. Part III gives the basic information about products of a biological origin which, because of their tremendous importance in normal nutrition and because of their usefulness in the treatment and the control of disease, the student of pharmacy should meet early in his educational experience. In the preparation of the text not only has the need of the pharmacy student been kept in mind but also the needs of the practicing pharmacist and the practicing physician. The plan of the book is the product of the thought of the Editorial Board, the personnel of which is made up of scientific men, each of whom has had a wide experience in the objectives and the destinies of America as a teacher, administrator and adviser to the professional pharmacist. That part of the pharmaceutical field covered by the material in this volume is the work of twenty-two authors from twenty institutions. This work, therefore, is a composite of the best pharmaceutical thought of our day and should certainly be in the possession of everyone who wishes to keep abreast of the advances in pharmaceutical science, education and practice.

Advancing Fronts In Chemistry, Vol. I—High Polymers, Edited by Sumner B. Twiss, Department of Chemistry, Wayne University, 196 pp., Reinhold Publishing Corp., New York, $4.

This is a series of lectures sponsored by Wayne University under the direction of Neil E. Gordon, Chairman, Department of Chemistry. The purpose of presenting these lectures to the public has been to give a logical, if limited, development of the recent chemistry of high polymers which will be of interest to the beginning as well as to the trained investigator. The first three chapters give a foundation for the material in the later sections. Chapters 4 and 5 give a review of the direct and indirect evidence for the free radical mechanism of addition polymerization. Chapters 6 and 7 present a discussion of the importance of chain length and size distribution. One of the most important phases of high polymer chemistry is the study of the geometry of long-chain molecules and the effect of intermolecular forces as illuminated by X-ray diffracton studies. This subject is presented in detail in Chapter 8. A new and different approach to the problem of orientation of chain polymers and their mobility in the liquid state is through the study of the mechanical properties of their concentrated solutions. The recent work with this technique is given in Chapter 9. The concluding chapter of this book presents the ultimately practical work which has been accomlished with the natural polymers—silk, cotton, wool.

Qualitative Analysis, A Brief Outline, by Harry N. Holmes, Professor of Chemistry, Oberlin College, Ninth Ed., 52 pp., The Macmillan Co., New York, $1.10.

This book was written for teachers who wish to give a brief but systematic training in qualitative analysis as the major part of the laboratory work of the second semester of Freshman Chemistry. Although the treatment of the subject is condensed it is reasonably comprehensive, including the preparation of the solution, analysis of cations and anions, helpful notes, and theory.

Virus As Organism, by Frank MacFarlane Burnet, M.D., Director, Walter and Eliza Hall Institute of Research in Pathology and Medicine, Melbourne, Australia, 134 pp., Harvard University Press, Cambridge, $2.

This newest volume in the Harvard University Monographs in Medicine and Public Health discusses some of the more important virus diseases of man from a consistently biological point of view. Dr. Burnet's basic interpretation of virus disease is that viruses are microorganisms which have evolved by parasitic degeneration from larger microorganisms, many of them in all probability from bacteria. Viruses survive by biological reproduction and a virus species must, like any other living species, have found a way of indefinite survival. Dr. Burnet stresses throughout his monograph the importance of the transfer of virus infection from one host to another and postulates that in the past all or nearly all the known virus diseases of man must have been similarly derived from animal infections. Dr. Burnet concludes that despite the great recent advances in knowledge of the physiochemical nature of viruses, there is no escape from the pragmatic necessity of regarding them as living organisms, reproducing their kind and subject to the same imperative of continued survival in a changing environment as other organisms.

The Dietary Of Health And Disease, by Gertrude I. Thomas, Assistant Professor of Dietetics, University of Minnesota, Fourth Ed., Illus., 308 pp., Lea & Febiger, Phila., $3.50.

The many recent changes in the field of nutrition are all reflected in this new edition. It includes the new standards which have been developed as a result of recent studies and the many practical applications of diet to particular conditions. The work includes the findings of recent surveys based on both the quantitative and qualitative analyses of dietaries designed to produce a minimal diet. In this edition the author has recognized the increased interest in psychodietetics which has brought about a closer appreciation of the physiological and psychological relationships of diet to health. The book recognizes the ways and means of combating the results of extreme grades of malnutrition as revealed in pellagra, scurvy, rickets and beri-beri, conditions which have become the world's foremost health problems. Even in the United States, pellagra is till widespread in the South and rickets in the North and these deficiency diseases still reduce vitality, predispose to illness and probably shorten life itself. Since physicians and their patients alike turn to the dietitian to advise them about the content and the preparation of diets necessary for invidual patients and for the treatment of special diseases, this book is designed to equip them to meet these demands.

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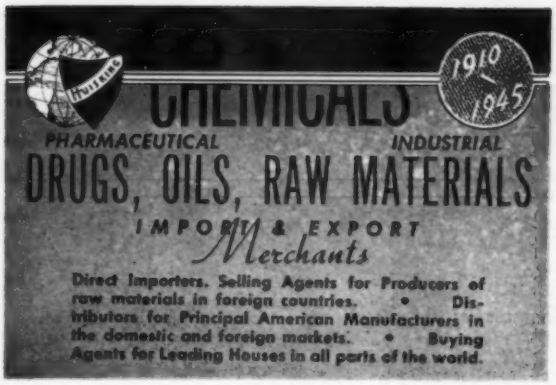
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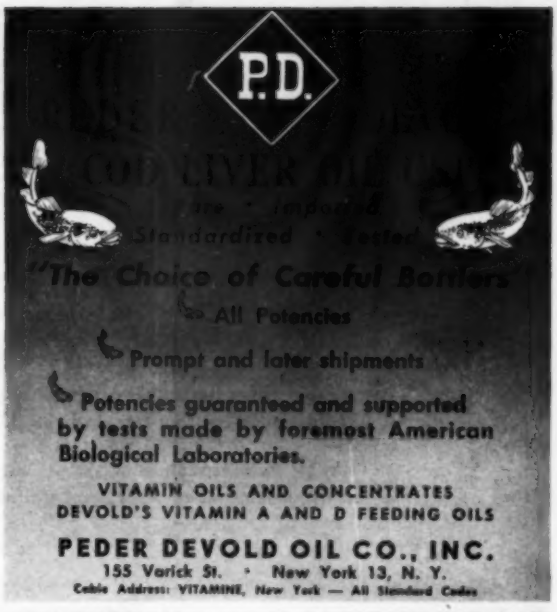
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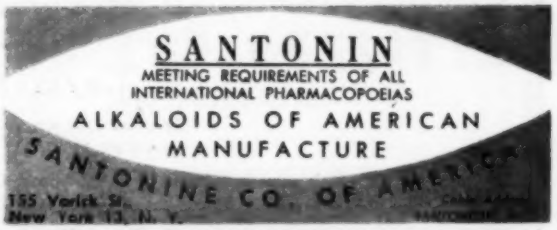

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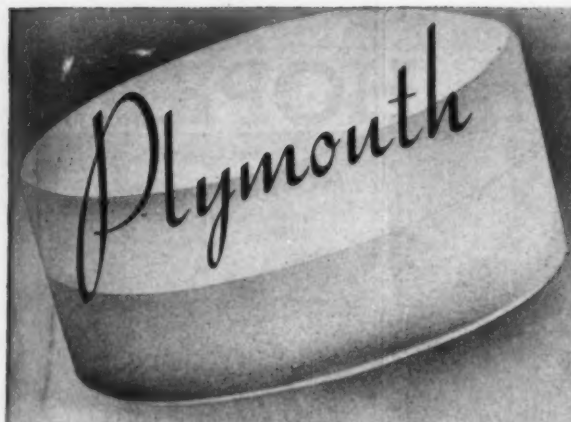

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Perfumer's Shelf

Ultrasonic Velocities of Essential Oils

According to Indian research workers A. Pande, M. Pancholy and S. Parthasarathy (*J. Sci. & Ind. Research* 3:362, 1944), an aid in the determination of the composition of various essential oils is available through determination of their ultrasononic velocities, in meters per second. In their work, ultrasonic velocity values were determined as follows for the oils listed below:

Orange	1300
Lavender	1310
Palmarosa	1192
Patchouli	1266
Manjal	1394
Aniseed	1451
Petitgrain	1391

Low ultrasonic velocities of less than 1300 meters per second indicate predominantly aliphatic compounds; values of 1391 to 1394 meters per second, ring compounds; and 1451 meters per second, aromatic compounds and high viscosity.

Ultrasonic velocity values for other essential oils were listed by these workers in a later report in the same journal, as follows:

Rosemary	1268
Cedar wood	1406
Cassia	1460
Citronella	1076
Lemon	1323
Mullium	1260

Oils from Hybrid and Tetraploid Mints

Improvement in the species and varieties of the mints grown commercially for oil production should be of much benefit to growers. It was from this viewpoint, report A. F. Sievers, M. S. Lowman and M. L. Ruttle (*J.A.Ph.A.*, Scient. Ed. 34:225, 1945), that investigations were made of hybrids of several species of mint (Japanese Mint, *Mentha arvensis* var. *piperascens*; spearmint, *M. spicata*) and water mint, *M. aquatica*) and two tetraploids, with respect to their probable commercial usefulness. In connection with the crosses of the Japanese mint it was the purpose primarily to develop hybrids of high menthol content that possessed greater vigor and resistance to the more serious diseases that cause damage in commercial mint fields. These hybrids and the tetraploids were grown in 1-200-acre plots to determine their general growth habits and provide material for distillation to determine the percentage of oil present and the quality of the oil.

The two hybrids of Japanese mint and water mint (*M. aquatica*) were more vigorous than the female parent and produced oils with 57.60 and 60.84 per cent of menthol. However, the calculated yields of oil per acre were relatively low in one case and very poor in the other. Under more favorable cultural conditions both yield and quality of oil may be somewhat better. These hybrids are completely resistant to the mint rust prevalent in the regions where they have been grown. This quality and their greater vigor could make them useful as material for further breeding and selection.

The four hybrids of Japanese mint and spearmint were also found to be more vigorous than the female parent and gave good indicated yields of oil per acre but only one of the oils contained as much as 40 per cent of total menthol. These hybrids are, therefore, of doubtful value as sources of menthol when grown under the conditions of the experiment.

The two tetraploids obtained by colchicine treatment included in the plot tests, one of commercial spearmint and the other of a cross Japanese mint, *M. spicata*, were extremely low in oil content (0.05 and 0.07 per cent, respectively) and appear to have no value except perhaps for further breeding work.

Para-Cymene Production

Reporting on the production of paracymene, J. Verghes, B. Bhushan, K. C. Gulati and M. L. Joshi (*J. Indian Chem. Soc., Ind. & News Ed.* 7:62 1944) describe the catalytic cracking of pinene and dehydrogenation of the monocyclic terpenes as effected over a variety of catalysts. The reactions were carried out in both liquid and vapor phases. Although the bulk of Indian turpentine is composed of carenes, these workers were unable to find any *m*-cymene. Typical catalysts were carbon in the form of activated coke, molasses carbon, bone charcoal, Merck's carbon B, activated coconutshell alone and impregnated with phosphoric acid or ferric sulfate, burnt alum, copper turning, partially dehydrated copper sulfate and with silica gel, partially dehydrated gypsum and impregnated with platinum. At 300° C. the highest yields of crude *p*-cymene were obtained with partially dehydrated gypsum. By recycling the pot residues after distillation, the yield of crude cymene was practically theoretical with the gypsum catalyst.

Essential Oil from Hua Chiao

C. W. Wang, Y. Y. Lu and T. H. Chen (*J. Pharm. Soc. China*, through, *Chem. Abstr.* 39:4714, 1945) report that the pericarp of *Zanthoxylum* spp. (Rutaceae), which is called "Hua Chiao" in China, yields 2.86 per cent of an essential oil with the following properties:

Specific gravity	0.846
Index of refraction	1.469
Boiling point	116°C.
Saponification value	22.24
Iodine value	192.1
Unsaponifiable matter	9.82 per cent
Ether extracts	3.4 " "
Chloroform extracts	1.4 " "
Alcohol extracts	7.5 " "

The active constituents of the oil have not been determined. The ether extract was found to possess anthelmintic and anesthetic properties. Hua chiao is used in China as a flavoring agent in cooking and for its anthelmintic action.

Basic Odors and Perfumes

Although many of the materials mentioned in his discussion are at present difficult to obtain or are unobtainable, S. Gottfried believes that many of them will soon be procurable. On this basis he has published in *The Perfumery and Essential Oil Record* (36:243, 1945) a rather comprehensive report on the basic odors and perfumes of jasmin, lilac, lily of the valley, and violet.

Natural oil of jasmin is obtained both by enfleurage and by extraction with volatile solvents. The latter has a much heavier odor than the former, the extracted oil is more flowery than that made from pomade and many leading perfumers are agreed that it lacks something they find in jasmin obtained by enfleurage. Although there were only a few straight jasmin perfumes on the market, it is used as a constituent of almost every sort of perfume. With-

out jasmin, a good perfume would be very hard to make, whether it be a pink carnation or an oriental bouquet. In a flower formula, the lilac requires the largest amount of jasmin. It is also essential in a good lily of the vally and even in a good violet. In any case, where jasmin is needed in a perfume, a carnation or natural jasmin and synthetic jasmin will asnwer the purpose. However, the jasmin note is seldom allowed to predominate and it must be used with great caution, especially in a lilac. Less jasmin is used in a lily of the valley than in a lilac, and still less than that in a carnation. In a violet, even less is used, but it is much more generously used in oriental bouquets. At one time, benzyl acetate, one of the common artificial jasmin odors was used excessively, but since the introduction of materials like amyl cinnamic aldehyde, its use has been greatly restricted.

Terming the violet the "queen of perfumes," Gottfried points out that Not only is natural oil made from violet flowers, but its leaves, in the form of soluble concrete, are used on a large scale to impart the clean note of the wood violet, as well as to give a freshness to other successful perfumes. It is surprising in how many of the most advertised perfumes the odor of violet takes an important place. In common with all natural flower perfumes, essence of violet flowers has a sharp odor which makes a distinctly impressive first impression—but diluted and mixed in the correct proportion with other floral concretes, it makes the most delightful and harmonious ensemble. As part of the discussion of this material, the following base for violet perfumes and toilet waters is given:

	Gram.
Violet concrete soluble	10
Orris concrete	5
Rose concrete	2
Cassie concrete	2
Orris concrete	2
Mimosa concrete	2
Jasmin concrete	2
Heliotropin amorphous	5
Ionone alpha	10
Benzyl acetate	2
Methyl ionone	2
Ylang ylang, Manilla	2
Neroli petales	2
Iraldeine	2

To change the character of the violet and give it a definite note, one may add 1 gram of aldehyde C.12 or ¼ gram of aldehyde C.14. Others may prefer a gram of aldehyde C.16 or 18, whilst a fresher note can be obtained by the use of 10 grams ethyl acetate.

The wood violet note is imparted to a violet perfume by the addition of oil of violet leaves. To give such a perfume a mush more pronounced effect, the quantity of orris concrete and of cassie concrete can be doubled.

Further Studies on American Musk

In the first of the series of studies on American musk it was shown that the musk of the muskrat, unlike that of the musk-deer and civet cat, consists mainly of a *pair* of odd-numbered macro-cyclic ketones, normuscone and dihydrocivetone. This suggested that these ketones constitute a regular series analogous to that of the naturally occurring fatty acids. At that time, because of insufficient material, it was not possible to show the presence of the expected lower and higher macro-cyclic compounds. In the latest discussion of these investigation, appearing in the *Journal of the American Chemical Society* (67: 906, 1945), P. G. Stevens reports that examination of the low and high boiling fractions of the ketone mixture resulting from the oxidation of the crude carvinols obtained from many thousands of glands, has indeed revealed the presence of two more macrocyclic ketones: cyclotridecanone and cyclononadecanone. The structures of these two ketones, which are the first cyclic compounds yet found in nature with 13 or 19 atoms in the ring, were conclusively proven.

Essential Oil Similarities

For those who may have forgotten, a little note in *Science News Letter* for October 27, 1945, reminds us that essential oils, though having a widely different chemical composition, have three common properties; volatility; combustibility, and the ability to form only a temporary grease spot on paper.

Nim Oil Constituents

The utilization of the bitter constituents of nim oil,, namely the nimbidin series, in the pharmaceutical industry is discussed by S. Siddiqui and C. Mitra in the (Indian) *Journal of Science and Industrial Research* (4:5, 1945). Nim oil, they report, yields nimbidin which melts at 90°-100° C. and has a specific rotation of 65°; nimbin, melting at 205° C. and having a specific rotation of 170°; nimbinin, melting at 192° C.; and nimbidolwith a specific rotation of 61°. Fractional hydrolysis of nimbidin yields neonimbidin melting at 222° C.; nimbidic acid, melting at 235° C.; and nimbidinic acid melting at 115° to 120° C. In their investigations, the Indian workers prepared the sodium, potassium, zinc, copper and quinine salts of nimbidinic acid. Nimbidin and nimbidol have been used in creams, lotions, soaps, shampoos, tooth pastes and gargles. Preparations of nimbidin have also been used for eczema, arsenical dermatitis and for the treatment of septic ulcers due to burns.

Dermal Irritating Properties of Perfume Materials

In view of current interest in the subject of allergy, H. R. Peterson and A. Hall undertook a study of the irritating properties of a number of essential oils and aromatic chemicals. Although the investigations are still under way, a preliminary report, published in the June 1945 issue of the *Proceedings of the Scientific Section of the Toilet Goods Association*, is of definite interest.

The samples used in the dermal patch tests were furnished by the Florasynth Laboratories, Inc.; the following procedure being employed in obtaining the desired evidence: The substance to be tested was applied full strength witthout dilution to the epidermis of the inner forearm. A circular area about 1 cm. in diameter was covered with the test compound, protected with an adhesive bandage, and allowed to remain undisturbed for 12 hours. Observations were made at 24-hour intervals to determine whether or not dermatitis had been produced. Both men and women were used in the tests.

Those substances with which 20 or more patch tests have been made, with negative results, may be assumed to be relatively devoid of irritating properties. The essential oils already so tested include: clary sage, cloves, lemon (California cold pressed) and neroli (bigarade petale); while the aromatics studied on 20 or more cases include: Alcohol C_9 (nonyl alcohol), alcohol C_{10} (decyl alcohol), aldehyde C_{10} (decyl aldehyde), benzaldehyde F.F.C., benzyl formate, cinnamic alcohol, citronellol extra, ethyl cinnamate, ethyl phenyl acetate, eugenol pure, and, hydroxycitronellal extra. So far, only the aldehyde, methyl nonyl acetic 100%, tested on 33 subjects, gave positive reactions in 3 cases.

Work is still in progress with those substances on which less than 20 tests have been performed. Other studies are going on simultaneously and interesting results should be forthcoming.

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Hydroquinone Sun Tan Composition

As many cosmetic chemists are aware, sun tan and related preparations containing hydroquinone, especially those made with a white cream base, have proved impractical because of the discoloration following oxidation of the ultra-violet light-absorbing agent. Attempts to overcome this disadvantage have had varying degrees of success, none of them fully satisfactory. In U. S. Patent 2,376,884, E. Schwenk and E. E. Henderson claim to have overcome this difficulty through the use of vitamin C. They have found that laevo-ascorbic or cevitamic acid is capable of inhibiting the oxidation of hydroquinone and at the same time does not tend to break the emulsion of which the cream or lotion base may be constituted. Several examples of such utility in making cosmetic items are given, of which the following is typical.:

I

Stearic acid	**20.00 Gm.**
Cetyl alcohol	**2.00 Gm.**
Hydroquinone	**5.00 Gm.**
Laevo-ascorbic acid	**0.25 Gm.**

II

Borax	**1.0 Gm.**
Sodium carbonate	**2.0 Gm.**
Glycerine	**6.0 Gm.**
Water, to make	**110.0 Gm.**

Mixture I is melted, and then emulsified with a heated solution of mixture II. By stirring until cold, a fine vanishing cream is obtained.

Proposed New U.S.P. Ointment Bases

Two new ointment base formulas proposed for inclusion in the forthcoming U. S. Pharmacopoeia XIII are announced by E. Fullerton Cook, chairman of the Committee of Revision of the U.S.P. One of these is of the "water-absorption" type, and the other is "water-washable," that is readily removed from the skin by washing with water. Hydrophylic Petrolatum *is the title proposed for the "water absorption" base which is anhydrous but readily mixes with water and most aqueous solutions. The formula given below, has been offered commercially for some time and has been favorably received:*

Cholesterol	**10 Gm.**
Stearyl Alcohol	**30 Gm.**
White Wax	**80 Gm.**
Wool Fat (anhydrous)	**150 Gm.**
White Petrolatum	**730 Gm.**
To Make	**1000 Gm.**

Melt the ingredients together on a water bath, mix thoroughly, remove from the water bath, and stir until the mixture congeals.

Hydrophylic Ointment *is the title proposed for the ointment base of the "washable" type. Developed by L. C. Zopf of the University of Iowa College of Pharmacy and hospital, the formula is as follows:*

Stearyl Alcohol	**250 Gm.**
White Petrolatum	**250 Gm.**
Glycerine	**120 Gm.**
Sodium Lauryl Sulfate	**10 Gm.**
Methyl Parahydroxy-benzoate	**0.25 Gm.**
Propyl Parahydroxy-benzoate	**0.15 Gm.**
Distilled Water	**369 Gm.**
To make about	**1000 Gm.**

Melt the stearyl alcohol and white petrolatum on a water bath and warm to 75° C. Dissolve the sodium lauryl sulfate and methyl parahydroxybenzoate in the glycerine and water, warm to 75°, and add this solution, with stirring, to the warm stearyl alcohol and white petrolatum. Stir the ointment until congealed.

Although other formulas of similar composition may also prove efficacious as ointment bases, the above combination has been selected because it contains a minimum number of ingredients, is relatively inexpensive to compound and possesses the advantage of simplicity of manufacture. The compatibility of the base has been established for a number of medicaments, and the resulting ointments were of good consistency, spread well and were easily removed with water

Brilliantines and Brilliantine Creams

In presenting the French point of view on brilliantines and brilliantine creams, E. Mahler (*S.P.C.* 18:889, 1945) remarks that the need for oiling and making supple hair that is often dried by outdoor conditions and certain modern shampoos has given rise to a new class of hair fixative brilliantine. Before discussing these newer products, however, Mahler feels that consideration should be given to older type products since all brilliantines have two principle aims: (1) To impart gloss and suppleness to the hair and to counteract the dull, flat effect. (2) To enable natural or artificial waves to stand up to modern everyday conditions in the open air, during sports and in all aspects of daily life.

So-called solid or "crystallized" brilliantines have undergone little modification during recent years, except that the use of about 10 per cent of aluminum stearate enables mineral oil to be solidified. Such combinations, however, have the disadvantage of tending to exude oil. Hence manufacturers generally prefer to use the old-type formulas using a petroleum base hardened by paraffin, ceresin or such, as in the following example:

White, long-fibered petroleum jelly	**950 parts**
White ceresin	**50 parts**
Color and perfume	**sufficient**

Single substance liquid brilliantines, as contrasted to the two-layer oil-alcohol combinations, have returned to fashion owing to the cult of bare heads, repeated waving, and shampooing. Sulfonated fatty alcohols, Mahler notes, are too detergent and require a larger proportion of oil. Modern brilliantine must be fluid so that it can be sprayed and the thin film must not darken the hair or tend to become rancid. In spite of other disadvantages, mineral or paraffin oils meet these requirements far better than do other oils of animal or vegetable origin. Hence the greater number of liquid brilliantines that can be sprayed consist solely of mineral oil

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without admixtures. Perfume and color for such brilliantines are generally prepared as specialized products.

The viscosity of the oils is sometimes an obstacle to their use in special sprays; a low-viscosity oil being essential. The American custom of reducing viscosity by the use of kerosene occasionally produces an odor to which customers object. However, the choice of oils and their careful mixing will give favorable results, as in the following example:

Ordinary viscous mineral oil	**400.0 parts**
Fluid mineral oil	**700.0 parts**
Specially soluble perfume	**3.0 parts**
Ultramarine blue liquid V (mineral oil-soluble)	**0.5 part**

Petroleum oils remaining on the surface of the hair produce a gloss and an iridescence which makes the hair shine, protect it against dryness, but do not nourish it. For this last purpose, "capillary" oils are needed. Castor oil is among the finest of such capillary oils, but it has the drawback of an unpleasant smell and total insolubility in petroleum solvents owing to its free alcohol. Castor oil appears to mingle with mineral oils of similar viscosity, but after a time, two layers are formed.

It has therefore been necessary to make castor oil soluble either by masking its alcohol function by a non-polar function or by the addition of solvents, or else by the two methods together, while the treatment robs it of its characteristic odor. Suitable mixtures are prepared as follows:

Mineral oil	**400 parts**
Light mineral oil	**500 parts**
"Soluble" castor oil	**100 parts**
Perfume and color	**sufficient**

Coming to his discussion on the newer brilliantine creams, Mahler states that whereas liquid brilliantines impart a gloss but do not "fix" the hair, emulsified brilliantines fix and bestow a gloss on the hair at the same time. This is therefore a real step forward. The fixative effect is obtained, not by viscosity, as in the case of crystallized brilliantines, but by a small quantity of emulsifying matter contained in the oil. These preparations consist of emulsions made from mineral oil, either of the "water-in-oil" type, using an absorption base, etc., or of the "oil-in-water" type on the classical lines.

One typical product of this type is made from:

Absorption base	**530 parts**
Water	**300 parts**
Triethanolamine	**8 parts**

The absorption base is melted and to it is added the triethanolamine diluted by water; the mixture is then stirred. This yields a semi-fluid cream, in spite of the small amount of water used. This emulsion is formed by small globules of oils crowded together without intervening spaces, and surrounded by a film of water which prevents them from coalescing. Once applied, the water evaporates, the emulsion breaks down and the hair is both brilliantined and fixed.

Another type of brilliantine cream conforms to the following formula:

Cholesterinated petroleum jelly	**100 parts**
Stearic acid	**50 parts**
Long-fibered petroleum jelly	**300 parts**
Mineral oil	**600 parts**
Benzoxide	**5 parts**
Water	**400 parts**
Sodium borate	**10 parts**
Perfume	**8 parts**

The borax solution is added warm to the melted fatty substances. Stir until cold. An increase in the proportion of water yields viscous milks, which are sometimes preferred owing to their lower price and the greater ease with which they can be applied.

Creamy Nail Polish Remover

Canadian Patent 426,997, granted to A. Dreyling, describes a cream-like finger nail enamel remover consisting of the following ingredients; all parts being by weight:

Ethyl acetate	**40.0**
N-butyl acetate	**40.0**
Castor oil	**4.0**
Perfume	**0.1**
Ethyl cellulose	**2.8**
Stearic acid	**11.0**
Concentrated ammonium hydroxide	**3.8**

New Vegetable Wax

The vegetable waxes that are suitable for industrial use are few in number. Hence it is of interest to learn of possible new sources. Such a possibility appears in a report by F. C. Higbee and E. F. Sievers (*Chemurgic Digest* 4:333, 1945) on a wax from *Calathea lutea*, of the Marantaceae of tropical America, particularly Brazil. The white film of wax which covers the under surface of the mature leaf of *Calathea lutea* has been mentioned by a few writers, but up to now no studies of the wax's physical properties have been made.

A purified sample of this wax was used by Higbee and Sievers for determining those physical and chemical constants usually reported for such materials. The results are shown in the following table in comparison with the constants of several commercially important waxes as recorded in the literature.

Wax	*Melting Point*	*Specific Gravity*	*Acid No.*	*Saponification*	*Iodine No.*
Calathea lutea	78-80°C.	.9735	11.8	20.6 24.5	13.4 13.4
Carnauba	83-86°C.	.99	1-4	68-84	13-13.5
Candelilla)	68-70°C.	.95-.99	12-21	50-95	14-36
Beeswax	63-65°C.	.95-.97	17-21	92-103	6-13

The solubility of the wax in a number of organic solvents at water-bath temperature is as follows:

Soluble in benzene, chloroform, carbon tetrachloride and xylol; fairly soluble in toluene and amyl acetate; slightly soluble in ether and petroleum ether; very sparingly soluble in acetone, methanol, ethanol and isoamyl alcohol. The melting point of the wax is not much lower than that of carnauba wax and it may therefore be useful in some of the products in which the latter is used.

Should the characteristics of this wax indicate that it has industrial possibilities, more careful studies of its yields and methods and costs of production would have to be made. Wild stands could perhaps be exploited in some localities. The plant is a perennial and new leaves begin to develop as soon as the mature leaves are cut down. It can perhaps be propagated successfully. Methods of removing the wax from the leaves more economically than by hand brushing will be necessary to make a low production cost possible.

Pharmaceutical Coloring Materials

Because very little work has been done on pharmaceutical coloring agents, Woods (*Canadian Pharm. J.* 78:559, 1945) decided to study the problem more closely. Six dyes that were investigated were found to be too sensitive to acids, bases or oxidation. These included: erythrosine, Orange 1, sodium indigo disulfonate, light green SF, fast green, and guinea green. Suitable colors were evaluated. Thus, the choice among yellow colors is tartrazine. For red tints and colors, cumidine red, amaranth and Ponceau X were found suitable. Brilliant Blue has met the toxicity tests and other standards as a satisfactory blue dye material.

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ADVANCING THERAPY

Hydrogen Peroxide vs. Pyrogens

The necessity for complete absence of pyrogens from solutions intended for parenteral administration is well recognized. While practicable methods, such as adsorptive filtration and others, have proved of great utility with a number of preparations, no satisfactory general method for removing pyrogens appears to have been found. Hence, the obser. vation by D. H. Campbell and A-Cherkin (*Science* 102:535, 1945) that pyrogens can be destroyed by heating with dilute hydrogen peroxide may prove useful for specific applications.

In the course of an investigation on plasma substitutes it was noted that solutions of gelatin were rendered non-pyrogenic by heating with potassium permanganate or hydrogen peroxide. This effect was studied further using two different preparations of partially purified pyrogens in addition to two lots of pyrogenic gelatin. On the basis of the results observed, it is suggested that treatment with hydrogen peroxide might be of practical value in rendering solutions non-pyrogenic, provided the peroxide does not adversely affect other constituents and where the amount used is sufficient to destroy the pyrogens present without leaving a deleterious excess.

Promin in Leprosy

Two years ago, a great deal of interest was aroused by the report that the use of promin resulted in improvements in a considerable percentage of leprosy cases treated. Another article by G. H. Faget and R. C. Pogge (*Public Health Reports* 60:1165, 1945), an extension and continuation of the first paper shows that the improvements observed in the earlier report continue to occur, and in a larger percentage of cases than previously reported. Thus, the longer the duration of treatment, the greater seems to be the percentage of improvement. It is also observed that it is in the group of patients receiving the larger doses of the drug that the most consistent improvement occurred.

Although this new study was undertaken, in part, to find an explanation of the mode of action of promin in leprosy, the mechanism remains undetermined. Despite this disappointment, Faget and Pogge have come to the conclusion that evidence of clinical improvement in a study of 137 leprosy patients treated with promin indicates that at present it is the treatment of choice for this disease. While it cannot be proved that promin possesses any chemotherapeutic properties against leprosy this seems to be the logical explanation for its mode of action in this disease. It is hoped, however, that further research will discover a still more powerful chemotherapeutic drug for the mycobacterial diseases.

Biotin

Considerable information on biotin, the most recently discovered member of the vitamin B complex, has been concisely summarized in the *British Medical Journal* (2:655, 1945). Biotin is a growth factor for many bacteria and molds and an essential nutrilite for most animals, and possibly man, in whom biotin deficiency has been reported by two groups of observers. Experimental biotin deficiency in animals has been brought on by limiting the biotin intake over long periods; including in the diet raw egg-white, which inactivates the vitamin; and by adding sulfonamide drugs to an adequate diet. The feeding of sulfonamides, particularly sulfaguanidine and succinylsulfathiazole, is one of the most recent methods of inducing vitamin deficiencies in animals. These drugs act by interfering with the bacterial synthesis of vitamins in the intestine, particularly the synthesis of the vitamin B complex and vitamins E and K. Research workers have recently produced chronic biotin deficiency in monkeys by all three methods. This is characterized by a thinning of the fur, a gradual loss of color of the hair, and in the later stages a heavy, scaly dermatitis covering the whole body but most conspicuous on the face, arms, and legs. The loss of hair is also affected by hormonal influences, as indicated by the slower regrowth of fur in menstruating and adolescent females. Twenty micrograms of biotin daily was sufficient to prevent the deficiency symptoms. The biotin deficiency from feeding egg-white was similar to that from adding sulfonamides to the diet. The prothrombin time was not appreciably affected—a finding in contrast to the increased prothrombin time found in rats given sulfaguanidine or succinylsulfathiazole with their food. Biotin deficiency in man, caused by administering large quantities of egg-white, has been reported by American investigators. They observed a greyish pallor of the skin, anemia, atrophy of the lingual papillae, and increasing dryness of the skin, which progressed to a maculosquamous dermatitis of the neck, hands, arms, and legs. A decreased excretion of biotin was observed after seven weeks on the egg-white diet.

Experiments have recently been made on the vitamin activity of biotin isomers and analogues. Biotin is a *d*-compound. The *l*- and *dl*- (or racemic) compounds are active only when tested on bacteria in very large quantities, although when assayed on rats maintained on a ration containing egg-white *dl*-biotin is stated to be half as active as biotin. When assayed on chicks *l*- and *dl*-biotin show no activity at all. It is indeed remarkable how slight changes in the chemical constitution, or even the optical activity, of a vitamin can profoundly affect its physiological activity. This is seen not only in the case of biotin but also with other B vitamins. Slight modification of the chemical constitution of pantothenic acid, vitamin B_1, and riboflavin, for example, results in products which are not only devoid of any vitamin-like action, but when fed to animals actually produce deficiency symptoms identical with those produced by lack of the vitamin they resemble chemically.

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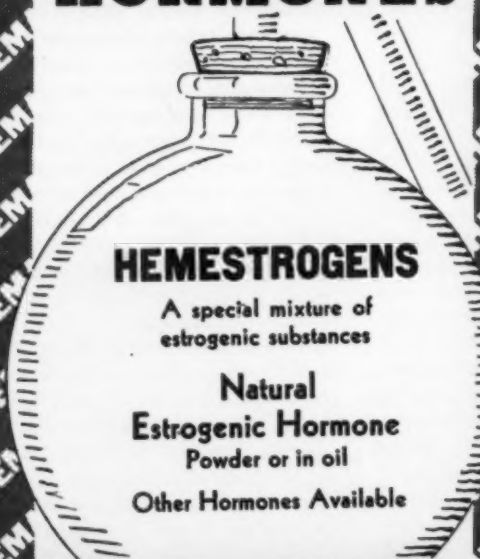

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New Antimalarials

Recent reports indicate that three new antimalarials may be added to the medical armamentarium. According to an item in *Science News Letter* (48:329, 1945) work at the National Institute of Health has resulted in the development of a new compound known conveniently as "NIH-204." Like atabrine, NIH-204 proved adequate in suppressing malarial attacks, but did not cure early attacks. Neither atabrine nor the new compound, more fully identified as 9-(2-diamylamino-1-hydroxyethyl) 1, 2, 3, 4-tetrahydrophenanthrene hydrochloride, was able to prevent the infection in studies reported by G. R. Coatney, W. C. Cooper, M. D. Yound and R. E. Burgess, all of the research institute.

Another compound which both prevents and suppresses bird malaria was reported by E. Waletzky and S. Brackett of the American Cyanamid Research Laboratories, according to the same source. Called "metachloridine," this new antimalarial is chemically identified as 2-metanilamido-5-chloropyrimidine. It is now being investigated clinically, but long trials will be needed before its value in human malaria can be determined.

From England comes a report of another commercially developed antimalarial called "Paludrine." Technical details and the chemical nature of the drug have not yet been revealed, presumably because of patent considerations. The only information available is that the compound is not a quinoline derivative. According to the announcement on Paludrine, cited in the *Chemist and Druggist* (144:489, 1945), clinical studies have indicated that the drug is not only more effective, but also considerably less toxic than either mepacrine (Atebrin) or quinine, and that it offers more protection against infection from the bite of a mosquito.

Penicillin by Inhalation

The value of penicillin administration by inhalation is indicated in the report of E. W. Hogens, M. Karp and C. J. Farmer (*Arch. Otolaryngol* 41:333, 1945). In studies of twenty-two patients, urine and blood levels showed that the drug is absorbed from the lungs to a sufficient degree. Because of its local effect the inhalation of penicillin may be the method of choice in cases of pulmonary disease. The inhalation of penicillin results in temporary improvement in bronchiectasis, but the condition frequently lapses back shortly after therapy is discontinued. In most cases gram negative bacteria are encountered, so that another antibiotic substance is also necessary, one to which these bacteria are sensitive. Asthmatic patients who have a superimposed bronchial infection with an organism to which they possibly are allergic may be favorably influenced by treatment. Acute pulmonary conditions respond to the inhalation treatment. The method may be used advantageously in the treatment of children aad other patients when the intravenous or the intramuscular injections of penicillin are unsuitable.

Penicillin in Ice Cream

Probably the most pleasant way to take penicillin is described in an item in *Chemical and Engineering News* (23: 1928, 1945). Here it is noted that workers at the San Diego Naval Training Center have found that mixing penicillin with ice cream makes possible the drug's administration by mouth instead of through the usual hypodermic injections. It is reported that this method of treatment has been found effective in the local therapy of streptococcus throat infections, scarlet fever, trench mouth, gingivitis, stomatitis, and acute or subacute tonsillitis.

Aminothiazole for Hyperthyroidism

At present thiourea and its related substance thiouracil are considered to be the most active agents in the treatment of hyperthyroidism. According to a report in the *Journal of the American Medical Association* (129:761, 1945), French workers have reported interesting experiments with aminothiazole, a substance used to prepare sulfathiazole, in the treatment of hyperthyroidism. A group of workers have reported in Paris that with the use of aminothiazole, otherwise called "Abadol," functional and subjective signs improve rapidly. Tremor is quickly suppressed. Tachycardia disappears and the pulse becomes normal. The weight increases by several kilograms. The basal metabolism is lowered to normal. The amount of cholesterol increases by 40 per cent, but the size of the goiter and exophthalmos does not appear to be influenced by this treatment. Aminothiazole has been administered to hyperthyroid patients in tablets of 0.1 Gm. at a rate of four a day during three to four weeks. Improvement persists in some patients after suspension of the treatment: in others, relapses take place after some weeks. Aminothiazole has not to the present time produced any toxic accidents, as mentioned by various authors, in England and in the United States in the treatment of hyperthyroidism by thiourea and thiouracil.

Sulfa Ointment for Pyoderma Prevention

The report of C. A. Wymuller and A. J. Ittner in the *American Journal of Diseases of Children* (69:283, 1945) indicates that the use of a 5 per cent sulfathiazole ointment acts as affective preventive of pyoderma in newborn infants. The following formula was used:

Sulfathiazole	**5.0 per cent**
Sodium lauryl sulfate	**1.0 " "**
Stearyl alcohol	**10.0 " "**
Cetyl alcohol	**3.0 " "**
Spermaceti	**10.0 " "**
Glycerine	**10.0 " "**
Water	**61.0 " "**

In the procedure employed, the infant is given a preliminary cleansing with sterile corn oil and 15 Gm. of the above sulfa ointment is applied. A soap-and-water bath is given twelve hours later. In the event that pyoderma does occur, the affected infants are isolated, the nursery closed to further admissions and all exposed infants given another treatment. The effectiveness of this prophylactic procedure is indicated by the finding that of 3,025 newborn infants treated with the sulfa ointment, only four contracted pyoderma.

Nicotinic Acid for Arthritis

Vasodilatation due to large doses of nicotinic acid may be beneficial to patients with rheumatiod arthritis according to the findings of C. M. Kurtz and his associates (*Wisconsin Med. J.* 44:761, 1945) in a study of 35 patients with arthritis of four months' to thirty years' duration. Significant objective improvement was seen in 26 cases, and 25 of these patients reported subjective improvement. In this series, enough nicotinic acid was given three times daily to produce a flushing reaction lasting an hour. Administered orally or by intravenous drip, the amount of this B vitamin given daily ranged from 400 to 5,400 mg.

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PURCHASING DEPARTMENT

Demand for Penicillin Soaring; Alcohol Firm at Higher Levels; Statistical Position of Menthol Weak

Producers of penicillin and builders of new plants for the manufacture of the product are to be given special priorities assistance in a move to increase production for which world-wide demand far exceeds present manufacturing capacity, the Civilian Production Administration announced.

Through issuance of a new direction seven to priorities regulation 28 the agency is planning to grant CC preference ratings for the following:

For capital equipment which will result in a substantial increase in production, which is needed to replace equipment in danger of imminent breakdown.

For construction materials for new plants or expansion of existing plants.

For production materials and maintenance, repair and operating supplies, when such materials or equipment cannot be procured without special assistance.

"Because of the reputation which penicillin has made since commercial production began in 1943," the agency said, "demand for it is soaring," and added that most of the demand was concentrated upon the 15 American plants, as the plants in Canada, Australia and the United Kingdom produce only enough to supply their own requirements.

Production has mounted from approximately 400,000,000 Oxford units in May, 1943, to an estimated 700,000,000 units for December, 1945, CPA reported, but added that while estimated fourth quarter requirements on American plants were for 2,273,000,000 units, production for the quarter was expected to be about 2,000,000,000 units.

Casein Output Drops

The 495,000 pounds dry casein production for October was 23 per cent less than a year earlier, and the lowest production on record for that month, reports the Bureau of Agricultural Economics. Stocks of dry casein in the hands of domestic producers continue at a high level. With 8,050,000 pounds on hand October 31, stocks were 59 per cent higher than a year earlier. Present stocks are also higher than those on the same date in 1943, but lower than in 1942 and 1941. Domestic casein markets developed marked firmness during the latter part of November, according to the weekly reports of the Production and Marketing Administration. Prices f.o.b. Buenos Aires were 19-19½c per pound. For dry casein several offers reached as high as 20c at the close of that month.

DECEMBER PRICE CHANGES

UP

Arabic gum sorts 1½c
Balsam Tolu 10c
Benzyl cinnamate 15c
Caraway oil 50c
Celery oil 50c
Ergot 45c
Ginger oil 50c
Kamala 2c
Menthol Nat. 55c
Mercury $3
Myrrh gum 2c
Petit grain oil 10c
Pimento berry oil 60c
Plantago seed 3c

DOWN

Balsam Copaiba SA 5c
Bergamot oil 25c
Coriander oil $4.75
Culvers root 1c
Dill oil 25c
Geranium Bourbon $1
Lime oil dist. 25c
Savory leaves 3c
Thyme oil red 25c
white 25c
Valerian root 3c

• Prices quoted in this section were current on the first of this month.

Alcohol Costs

A second advance in alcohol prices was effected on November 28 when OPA authorized a ceiling increase of 3.5c per gallon for basic formula ethyl alcohol produced east of the Rockies. Other alcohol formulas were moved up from 2.2 to 3.5c, and the new advances resulted from studies of high conversion costs and the necessity of compensating producers who have been operating far below capacity. The OPA had allowed ceiling raises of 2c per gallon on October 19, 1945, to cover higher molasses costs paid to RFC.

Liquidation of the government's alcohol stockpile of some 80,000,000 gallons is involved at the same time. Under normal conditions and without the benefit of bureau controls a quantity of alcohol of that size would have an adverse effect if liquidated in the open market. Under the present plan, some 40 gallons of RFC holdings must be sold for every 60 gallons of new production, and the government and high cost alcohol distillers are evidently spared from experiencing heavy losses.

The maximum ceiling advance, 3.5c per gallon is extended to tax paid ethyl alcohol, to SD2B and SD29-1. The order incidentally does not apply to the West Coast industry.

Caffeine Industry In Brazil

Production of caffeine, a relatively new industry in Brazil, may total 300,000 kg. in 1945 as compared with 200,000 last year. It is believed that Brazil will be able to produce caffeine in crystal and powder form, both meeting United States Pharmacopoeia requirements. Of the ten factories in the country, six use heva mate, two coffee, two cocoa, and another factory under construction will use tea.

Menthol Trading Mixed

Trade in Brazilian menthol is seasonally quiet. During the early part of the trading period under review spot prices advanced with some factors quoting at a range of from $4.75 to $5 a pound.

(Continued on page 127)

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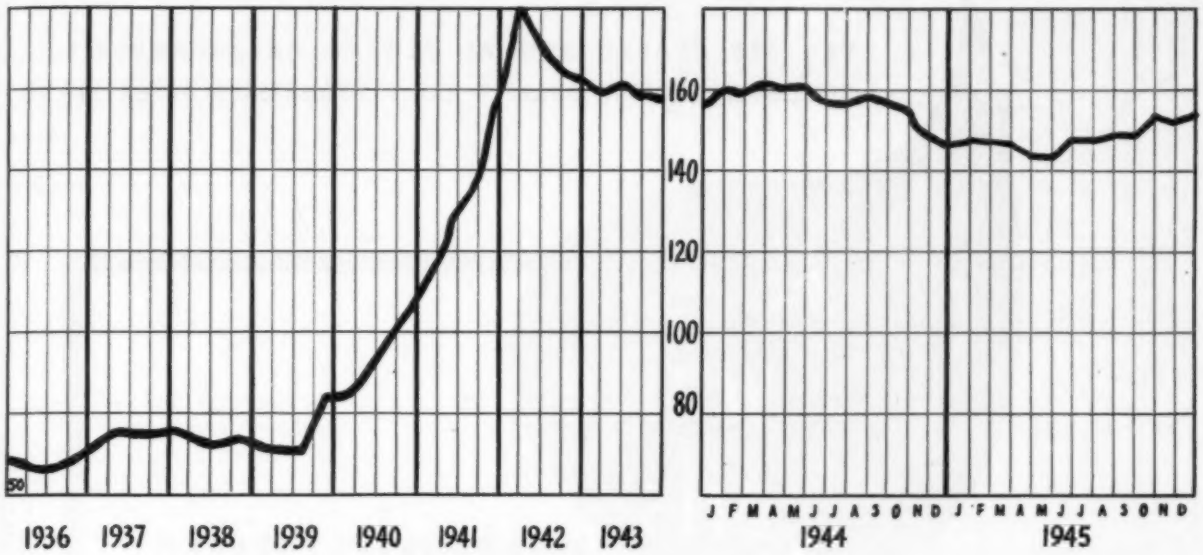
50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for December advanced from 155.1 to 156.2.

Mint Oil Output Final Estimate Issued; First Lots of Cassia and Anise Oils From China On Way

The 1945 peppermint oil production is estimated at 1,502,000 pounds, according to the final report of the Bureau of Agricultural Economics. This represents a decline of 107,000 pounds from the November report, and compared with 1,195,000 pounds for 1944. The 1945 output of spearmint oil amounted to 295,000 pounds, against the November preliminary estimate of 312,000 pounds, and compared with 217,000 pounds in 1944.

Peppermint Oil

	Acres planted 1945	1944
Indiana	28,800	21,800
Michigan	17,200	15,900
Ohio	240	160
California	650	1,120
Oregon	7,500	6,000
Washington	4,400	3,900
Total	58,790	48,880
	Oil, pounds 1945	1944
Indiana	616,000	394,000
Michigan	330,000	308,000
Ohio	8,000	4,000
California	24,000	29,000
Oregon	308,000	300,000
Washington	216,000	160,000
Total	1,502,000	1,195,000

Spearmint Oil

	Acres planted 1945	1944
Indiana	6,800	5,400
Michigan	2,200	1,900
California	.....	.....
Total	9,000	7,300
	Oil, pounds 1945	1944
Indiana	218,000	151,000
Michigan	77,000	66,000
California	.....	.....
Total	295,000	217,000

Anise and Cassia Oils Afloat From China

First lots of cassia and anise oils to be shipped from China to the United States since the war are reported afloat. Both oils are widely used in the United States for flavoring in pharmaceuticals and medicated confections. Cassia is also used in soaps. While the exact quantities are not known it is understood that over 10,000 pounds of anise is consigned to a single importer.

Essential Oils From Paraguay

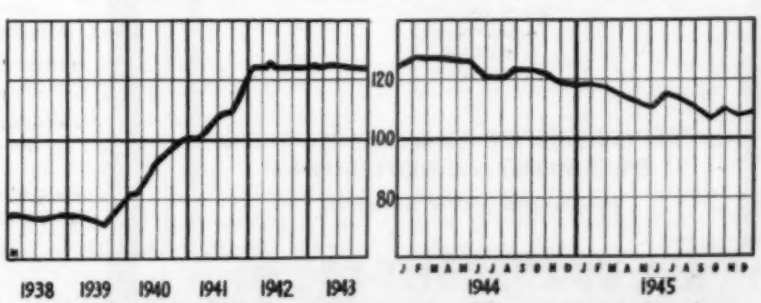
Exports of guaiac-wood oil from Paraguay to the United States during the first 9 months of 1945 amounted to 7,320 kilograms, valued at $35,939, in comparison with 600 kilograms, valued at $2,976, in the corresponding period of 1944. Paraguay's exports of petitgrain oil to the United States from January through September 1945 totaled 87,919 kilograms, with a value of $292,491, a slight decrease from 90,539 kilograms, valued at $258,785, in the like period of 1944.

During the first 9 months of 1945, Paraguay also exported to the United States 307 kilograms of espartillo oil, worth $1,015.

Essential Oils Production In Sicily

Unofficial estimates place the 1945 production of essential oils in Sicily at about 200,000 kilograms. Considerable quantities of lemon oil now are being shipped to continental Italy and prices have risen rapidly, recent quotations being 1,500 lire per kilogram, compared with between 500 and 700 lire which the Foreign Commerce Institute has been paying for Allied account. Bergamot

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index advanced from 130.1 to 131.0. Menthol was higher at $4.55; mercury rose to $110.

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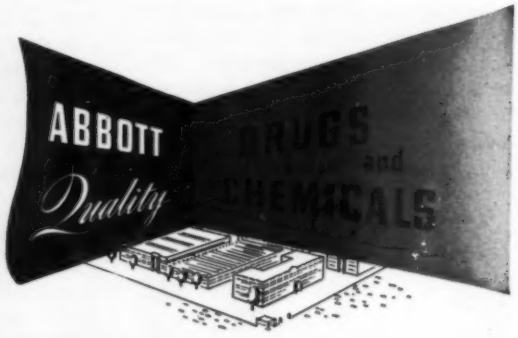

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oil which is produced chiefly in Calabria and marketed largely through Messina, is quoted at prices ranging from 1,500 to 1,600 lire per kilogram. Production of this oil in 1945 is estimated at 125,000 kilograms, compared with 160,000 kilograms during 1944. Considerable stocks accumulated in the war years are believed to be on hand.

Floral oils, such as jasmine, produced in the Province of Messina, are said to be finding a demand among Italian perfumery manufacturers at between 60,000 and 70,000 lire per kilogram.

Aromatics Tight

Despite the improvement in the supplies of several aromatic chemicals there were numerous tight spots. Notable among these were citronellol, citronellal acetate, coumarin, ethyl phenyl acetate, ethyl vanillin, geraniol, geranyl acetate, hydroxycitronellal, ionone, isoeugenol, lanalool, musk ambrette and ketone, phenyl ethyl alcohol and vanillin.

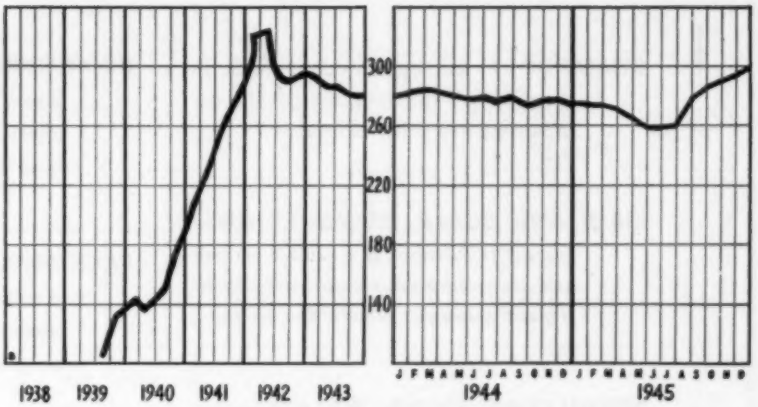
Spanish Oils Tight

With the possible exception of sage oil, spot offerings of Spanish oils were very limited. Reports in the trade indicated that any future offerings from Spain will be at higher levels. Only small quantities of rosemary at higher prices were expected to be offered until the new crop becomes available in April. Spanish spike lavender was in limited supply, and the new crop will not be available until September. There were practically no spot stocks of red and white thyme oil, although moderate quantities were reported to be afloat. At the moment there appeared to be sufficient quantities of sage oil to satisfy consumers requirements.

Miscellaneous

Small shipments of bois de rose from Brazil were absorbed by manufacturing industries. The end of December and January should find the market better supplied. Spasmodic shipments of Ceylon citronella have not been adequate to meet consumers' needs in the absence of any Java citronella. Much of the same situation prevailed in lemongrass, despite recent arrivals from India and Brazil. Failure of eucalyptus replacements to arrive from Australia kept the market in a very tight position. Domestic lemon and orange oils remained in limited supply. Very little sandalwood oil is available on spot. Despite the optimistic predictions regarding the early flow of French floral oils immediately following the end of the war, only token quantities have been arriving here. No further decline is noted in oil caraway although the arrival of Dutch material is continuing to provide the market with sufficient supplies. Wintergreen Southern is reported growing very scarce. Geranium is featured by an upward tendency.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index advanced from 287.7 to 290.2. Balsam Tolu rose to $1.85; Ergot jumped sharply to $1.60; gentian root rose to 36 cents.

MENTHOL TRADING MIXED

(*Continued from page 123*)

From this level spot prices softened with the business year closing at prices ranging from $4.55 to $4.80 as to quantity and seller.

There is a good supply of menthol on spot. Another new Brazilian crop is under way and production should again increase in the months ahead. Cables are reported from the Orient which seek to obtain data concerning market conditions here. While the quantity of menthol available in China for export is not known, some in the trade believe that some material will soon be afloat from that country and that more normal prices, ranging from $2.50 to $3 a pound will prevail here by next Spring.

Glycerin Tight

The holiday season has tended to ease the pressure on glycerin but the over-all supply position remains exceedingly firm. As far as can be learned little or no crude material is afloat from South America, but it is understood that some refined material was recently purchased in Australia for shipment here. Since the September figures covering production, shipments, and stocks were considerably delayed it may be some little time before official figures for October are available.

Mercury Higher

Since the spot market price for domestic mercury advanced again to a range of from $110 to $115 a flask, the mercurial group as a whole was strengthened to that extent. Domestic mercury, however, continues to sell at from $10 to $12 a flask below the cost of Spanish material. The export price in Spain remains at $105 a flask, which would figure $125 duty paid.

Some factors point out that it would not require much of a demand to absorb the available supply of domestic metal. Normally the United States is an importing nation so that it is quite possible Spanish producers are maintaining the current export price of $105 per flask f.o.b. Spanish ports in anticipation of a renewed demand from the United States.

Far Eastern Products

There is a growing interest in a number of Far Eastern products including menthol, agar, camphor, etc. In some years prior to the outbreak of the war imports of agar from Japan ran between 500,000 to 550,000 pounds with a value of between $380,000 to $400,000. Camphor imports ran close to 3,000,000 pounds a year with a value of approximately $1,500,000. The production of synthetic camphor, however, has been materially increased, and with the cessation of war demands for the technical material, it is generally believed domentic production will soon prove sufficient to meet all necessary civilian requirements. Both ounce and half ounce tablets are still scarce on spot but distributors have a sufficient supply of powdered refined material to meet deliveries fairly promptly.

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BODY RUBS: Isopropyl Alcohol evaporates slowly, thereby prolonging the cooling effect when used in body rubs. Isopropyl Alcohol has no denaturants.

FACE AND HAND LOTIONS: Isopropyl Alcohol evaporates slowly, has little tendency to dry the skin, and aids in keeping the skin soft.

AFTER SHAVE LOTION: Isopropyl Alcohol is excellent for this product because it aids the after-cooling and skin-freshening qualities of the lotion.

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Cod Liver Oil Problem

Cod liver oil is about to enter its main season of production in Norway and major importers explain that the article has suffered a considerable decline in consumption in the United States as the result of the increased popularity of synthetic vitamins.

The situation in poultry grade of oil offers a problem, since trade factors point out that they do not hold out much hope for the article in view of numerous competitive items that have appeared in this market in recent years.

Shipping prices on poultry cod liver oil remain too high for local importers to attempt to recapture the trade that had been lost during the war period when shipments were cut off from abroad. Substitute articles have met with considerable favor here with the low cost of such items serving to encourage their use.

Vitamins Down

Producers of Niacin (nicotinic acid USP) have reduced prices 50c per kilo and now quote in 50 ko. drum at $6.50 per kilo; 10 ko. drum $6.60; 1 ko. drum $6.80. Nicotinamide USP has also been reduced by $2.25 per kilo and is now offered in 100 ko. drum at $11 per kilo; 10 ko. drum $11.10; 1 ko. drum $11.30.

Miscellaneous

Aloin and podophyllin are featured by a firm tone in keeping with high raw material costs. The demand for butyl alcohol and butyl acetate is said to be running ahead of supply. Imported cream of tartar and tartaric acid continue to be offered here at prices below those quoted by major domestic producers. More strychnine is expected to be available in the market after the turn of the year. A major producer of citric acid is now accepting orders for the first quarter of 1946. There is more acid available to regular consumers. Quinine salts are meeting with considerable attention and reports from local trade factors indicate that Government restrictions will continue in force for some time to come.

CRUDE DRUGS

Vanilla Outlook Strong

Trade in vanilla beans is reported as quiet at the moment but developments are taking place which tend to make for a decidedly stronger outlook. The new crop of vanilla beans in Madagascar is reported at 280 tons while the 1946-46 comoro crop is placed at 90 tons, thus making a total of 370 tons or only enough material to take care of minimum requirements in the United States. Meanwhile European outlets are beginning to open, following the war period, and it is generally feared that a rather tight supply situation will develop in 1946. The last export quota established on bourbon beans by the French Colonial Government amounted to 700 tons for the United States covering the period July 1, 1944, to July 1, 1946.

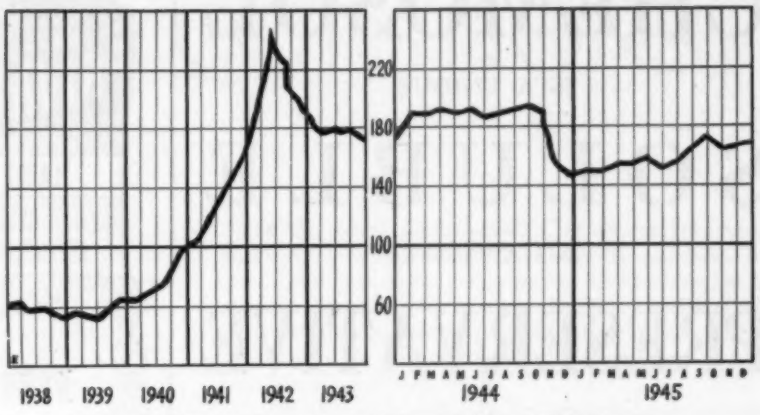
Negotiations are now under way covering a new quota beginning July 1, 1946, and it is understood that major importers are endeavoring to have the new export quota cover a six months period rather than two years. The potential European outlet of vanilla beans is estimated at between 100 to 150 tons a year, thus it is generally feared the United States share may seriously be reduced in the new quota. Since V-E Day France received 60 tons of beans from Madagascar and there is believed to be an additional lot of 60 tons afloat for European consumption.

The new crop of Mexican beans is reported a failure and small lots of green beans are rapidly being purchased by native curers at ceiling prices or better.

Ergot Up

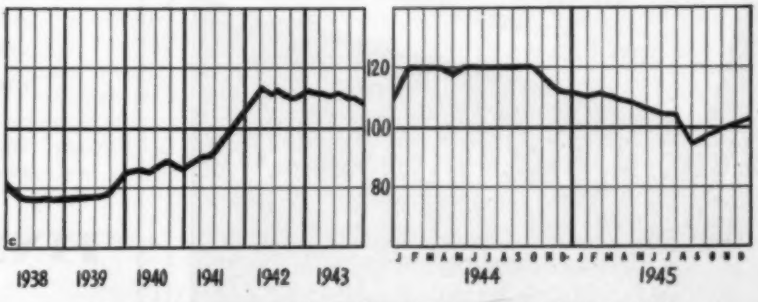
Detention of numerous lots of ergot arriving in this country has finally resulted in severe curtailment in released stocks here. For one reason or another, the Food and Drug Administration has ordered numerous arrivals withheld from the consuming trade and, although no special pressure of demand has yet developed, dealers have revalued released goods substantially and at the close of market operations during the period under review the price was close to being nominal around $1.60 to $1.65 per pound.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index advanced from 161.5 to 162.1. Bergamot was offered at $8.50.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index advanced from 102.0 to 103.1. Balsam Tolu rose to $1.85; menthol advanced to $4.55.

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READERS' QUESTIONS

BUBBLING BATHS: If it is within the limits of your position to give me the following formula, I shall appreciate the favor. The formula in question is one for making an effervescent, bubbling bath powder which will produce a quantity of good, lasting bubbles. Dearborn.

An effervescent bath powder of the usual type can be made along the following lines:

Sodium perborate	**40.0**
Manganese sulfate	**4.0**
Potassium bitartrate	**55.0**
Perfume	**1.0**

Probably what you have in mind is a foaming bath powder which according to Chilson, may be made from:

Saponin	**15.0**
Sodium lauryl sulfate	**82.0**
Perfume	**3.0**

CREAM SHAMPOO: I have recently prepared a cream shampoo containing powdered castile soap, stearic acid, synthetic detergent, potassium carbonate, water and glycerine. The product turned out very nicely. However, while it does clean the hair, it does not produce sufficient lather. If you can suggest an improvement in this formulation in order to produce more lather it would be greatly appreciated. Pittsburgh.

I think that the lathering properties of your product can be greatly improved by substituting sodium or potassium coconut oil soap for some of the castile soap. The higher lathering properties of lauric acid and other fatty acids in coconut oil will improve the foaming action. Castile soap, while mild and efficient as a cleansing agent, tends to produce a firm, tight lather.

SHAVING BOWL SOAP: I wondered if you might be able to suggest to me a practical economical formula for the manufacture of a shaving bowl soap? Bound Brook.

A very comprehensive article on shaving soaps by Dr. E. G. Thomssen appeared in the February 1945 issue of DRUG AND COSMETIC INDUSTRY which I highly recommend to your attention. Merely to indicate the composition of such a product and to enable you to estimate costs I am appending a formula for a mug shaving soap taken from this article; complete details on its manufacture are given in the original source:

Tallow (bleached extra)	**270 lbs.**
Coconut oil (cochin grade)	**162 "**
Stearic acid (double pressed)	**312 "**
Soda lye 40° B.	**48 "**
Potash lye 38° B.	**108 "**

LOCUST GUM MUCILAGE: We are interested in preparing 10 gallon batches of a mucilage of locust bean gum. Could you suggest us a method for preparing it without the use of a mortar? This mucilage is to be used for the suspension of a bismuth, subsalicylate, kaolin, salol and paregoric mixture? Please inform me if there is any special machinery or apparatus for this purpose. San Juan, P. R.

To my way of thinking, the simplest method for preparing this mucilage in large volume would be through the use of a battery of ball or pebble mills. The process is simple and efficient and works on the same principle as a mortar and pestle. Suitable equipment and methods of use are described in the manufacturers' catalogs.

EMOLLIENT HAND LOTIONS: I would appreciate learning where in DRUG AND COSMETIC INDUSTRY *there were discussions on hand lotions and creams. I would also appreciate receiving from you one or two formulas in regards to emollient hand lotions. Camp Edwards.*

Abstracts on new developments in the formulation of hand lotions appear frequently in our publication. Two very complete articles, one on formulation, and one on manufacture are available in the "Drug & Cosmetic Review," 1942-43 edition, pages 303 and 309.

A rather simple emollient cream can be made from:

Stearic acid	**14.0**
Lanolin	**5.0**
Lecithin	**1.0**
Triethanolamine	**3.0**
Glycerine	**10.0**
Alcohol	**5.0**
Perfume	**0.5**
Preservative	**0.1**
Water	**61.4**

Perhaps a product with somewhat more emollient properties may be obtained by using a superfatted cream, as in the following:

Lanolin, anhydrous	**20.0**
Absorption base	**10.0**
Vegetable oil	**15.0**
Cetyl alcohol	**3.0**
Propyl para-amino-benzoate	**0.5**
Water	**51.5**

Melt the first four ingredients on a water bath, add the small amount of anesthetic and then previously warmed water in a slow stream, simultaneously providing vigorous agitation until the ointment begins to thicken. This formula supplies nourishment, lubrication and a small amount of anesthesia which is useful in those cases where pain is present. This preparation is greasy but it will be found useful in relieving badly chapped hands.

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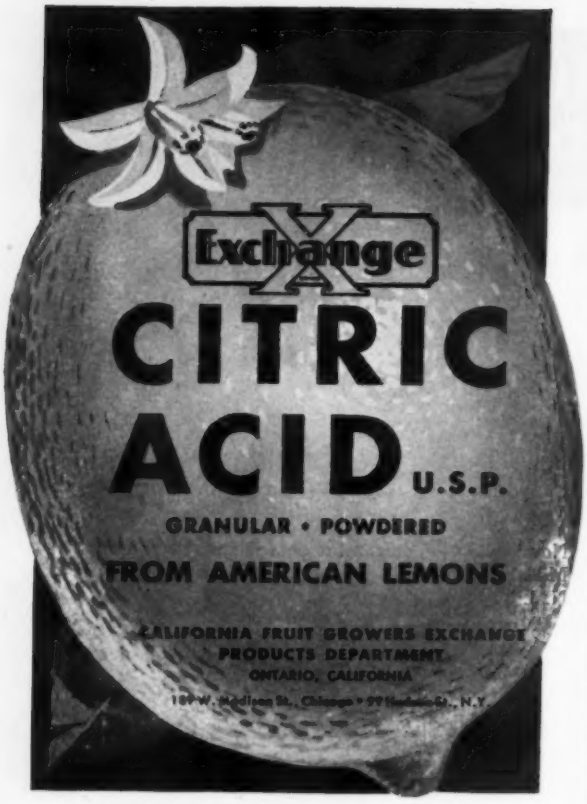

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Defects in Toiletries

(*Continued from page 49*)

clear and a cloudy layer. Solids suspended in liquids may refuse to separate and float rather than sink. Then again they may coat a clear bottle and appear untidy. Sometimes an internal pressure is developed which breaks the packages, most often due to volatility of one of the solvents. Color changes and off odors may appear. In fact, almost anything can happen to an innocent and presumably properly made liquid cosmetic.

The correction of these conditions oftimes is not too simple a matter. Clear solutions should be properly clarified by filtration. Aging, filtering at reduced temperature, lessening the amount of solute, proper attention to storage conditions to guard against corrosion, contamination from surrounding atmosphere and use of a proper filter and filter aids, usually correct cloudiness and sedimentation. Oxidation which may cause sedimentation can be accelerated by slowly bubbling air or oxygen through the liquid in the storage tank for several hours before filtering. The liquid may also be submitted to the action of ultra violet light in a continuous thin layer if light causes reactions of any kind. The breaking of liquid emulsions is most often due to improper manipulation in the making of the emulsion. Proper balance of water, oil and emulsifying agent are quite essential. Purity of raw materials used, should be checked and when soaps are included in emulsions, hard water or any metal must be eliminated. Suitable mixers or emulsifiers are very necessary. Temperature at which the emulsion is made must be carefully controlled. The determination of and control of pH of the ingredients is helpful. Quick cooling and colloid mills or homogenizers for subsequent treatment of the emulsions are essential in many cases. Unless these conditions are standardized and controlled one is inviting difficulties in making liquid emulsions. Defects in colloid solutions, such as are used for lotion and hair setting preparations, may most frequently be traced to use of the wrong type of gum in making such a solution or to certain incompatibilities with the gums. Very often gum Karaya is used with other gums to make lotions. When first made, they are quite satisfactory. It is quite well known that this gum has a tendency to thin out or liquefy with age. Gelatin should not be used with gums. Too high a percentage of alcohol will precipitate gums and alkalis often thicken colloidal gum solutions. If starch is used with gums, care should be taken not to use too great a percentage. Since temperature changes, that is extremes of heat and cold, affect these solutions, they should be tested under accelerated conditions before being put into distribution. Liquids in which solids are dispersed offer less trouble than the other types of liquids just discussed. Probably the most frequent difficulty is that of getting the solid material to settle sharply, rather than floating or sticking to the sides of a clear glass bottle making the contents look unsightly. This may usually be corrected by reducing the surface tension of the liquid, by the use of a suitable

wetting agent or being sure the weight of the solids is heavy enough. Another difficulty often encountered is that the solids pack too firmly upon settling. This may often be corrected by including a percentage of inert substance of lighter density like magnesium carbonate.

Creams and pastes include some of the more difficult conditions as far as imperfections are concerned. Separation, shrinkage and cracking like in vanishing cream, grittiness like in cold cream, discoloration, rancidity and gas formation are among the most common and serious defects. Besides these there are difficulties with bacteria and fungi, with corrosion and deterioration of packages like tubes and screw caps particularly.

Separation usually occurs in solid, emulsion type creams that have been subjected to higher temperatures. It may also be due to the use of incompatible ingredients as for example, acids or heavy metals in soaps, electrolytes in glyceryl monostearate or an excess of triethanolamine rather than fatty acid when T.E.A. soap is used as the emulsifier. It is quite customary to make certain creams of the greasy type soft enough to spread and penetrate easily. This condition generally is produced by the use of liquid mineral or vegetable oils. If too great a quantity of the mineral or other waxes is used, the finished cream is too stiff. Since the viscosity of the oils used, to a degree, influences their separation, it is well to study this detail and to stick to the heavier gravity mineral oils. Improper emulsification of the greasy portion of the cream with water is another reason for separation. Solid creams are emulsified in the

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liquid state as it is well known. It is good practice to hold them in the liquid state to ascertain if the emulsion holds at the higher temperature. If not, then it is very probable that separation will occur during shelf life and the emulsion should be properly made before it solidifies and at which point a defect is not so readily detected when the cream is still fresh. Shrinkage and cracking of the creams is due to loss of water or other volatile ingredients. It occurs most frequently with vanishing creams. The remedy is to pay closer attention to the closures or in some cases to plug the top quarter inch of the jar with molten paraffin or use one of the safety seals which are available for tighter closing. If possible smaller openings should be used on jars for these creams, so as to expose less area to the atmosphere. At times a greater percentage of humectant like glycerine or glycol is helpful. Grittiness often appears in cold creams that have been subjected to temperature changes during shelf life. Examination indicates this is due to two things, the crystallizing out of the higher melting point waxes or the throwing out of solution of borax, probably due to loss of moisture in the cream. This condition is difficult to correct. At times increasing the wax content will aid materially. Discoloration and rancidity are due to chemical changes. If the cream darkens the perfume used is probably at fault or it may be due to impure ingredients or presence of metals in the product. The use of proper perfumes, preservatives and making the creams in corrosion resisting equipment will go far toward correcting these conditions. Gas formation in creams may be due to bacterial or fungicidal action or to chemical reaction. In the latter case examples are on record where carbonates have been used with fatty acids. These easily generate carbon dioxide by reacting chemically. Bacterial action is best controlled by using a proper bacteriostatic substance like the esters of benzoic acid to prevent this.

In the case of pastes, packed into tubes, many defects are evident. Corrosion of the tube even to its complete disintegration is not uncommon. The answer here, of course, is chemical reaction between the tube and the product. It is quite common in creams that contain soaps. Careful investigation under accelerated laboratory conditions especially at lowered and elevated temperature is indicated for every product packed into tubes, especially at this time when pure tin tubes are not obtainable. The tubes themselves should also be carefully examined for pinholes and thin spots. Separation of liquid from a product packed into collapsible tubes is very evident and annoying even if the separation is very slight. Oily creams packed into tubes should not melt below 110° F. if this is possible. Tooth pastes are particularly prone to separation, as here not only separation but curdling and hardening occur as well. The separation may be due to insufficient percentage of a proper binder or more liquid ingredients in the paste than the solids will hold. As storage temperatures change, liquid exudes from the mass and is not reabsorbed. Hardening and curdling are usually due to the

liquid ingredients being "over absorbed," so as to say, by the solids and being tied up in the product so as to lose their softening ability. At times the hardening may be due to chemical change. A case in this respect comes to mind. A tooth paste which had been successfully made for years suddenly hardened in the tube and took on a strongly biting, caustic alkali taste. As it contained considerable soap, it was concluded the soap was too high in free caustic alkali. An analysis proved otherwise. Then the chalk was examined and free calcium hydroxide was discovered in it. The solution of the difficulty was simple then, for the sodium soap was being converted into lime soap and free caustic soda being liberated by the reaction. This point emphasizes the necessity of properly evaluating raw materials at all times and to attain uniform quality where pastes are involved.

While these comments may be helpful in certain regards, they do not cover the whole category of defects that occur in toiletries. Many manufacturers of these products too often labor under the delusion that, once they have a formula, anyone can make it. Even with the simplest of formulas something will go wrong at times and may result in a very costly experience. It is necessary, therefore, to depend upon something more than a rule of thumb in putting together cosmetic formulas. Where conditions permit, laboratory control methods and proper sample examination is an economy in the long run.

S. De Witt Clough

(*Continued from page 43*)

well rounded research staff that has continued to give Abbott profitable specialities. An Executive Committee headed by Rolly Cain former president of the Swan-Meyers Company has contributed much to Abbott progress. Not to be overlooked is Vice-President Fred Young, in charge of production, who has done an outstanding job in getting Abbott products produced when they were needed.

S. Dewitt Clough might be called a man's man. He has a quick smile and ready wit. "Fortune" once described him as having "a large head that sometimes makes him look like an eager, enthusiastic boy fixed up to impersonate a man of sixty." In his comfortably designed office DeWitt Clough suggests to the visitor a neat-as-a-pin executive who likes people and gets "his boys" to do their inspirational best for old Abbott. His door is forever open and he takes great pride in his pleasant relations with all his employees--from top to bottom.

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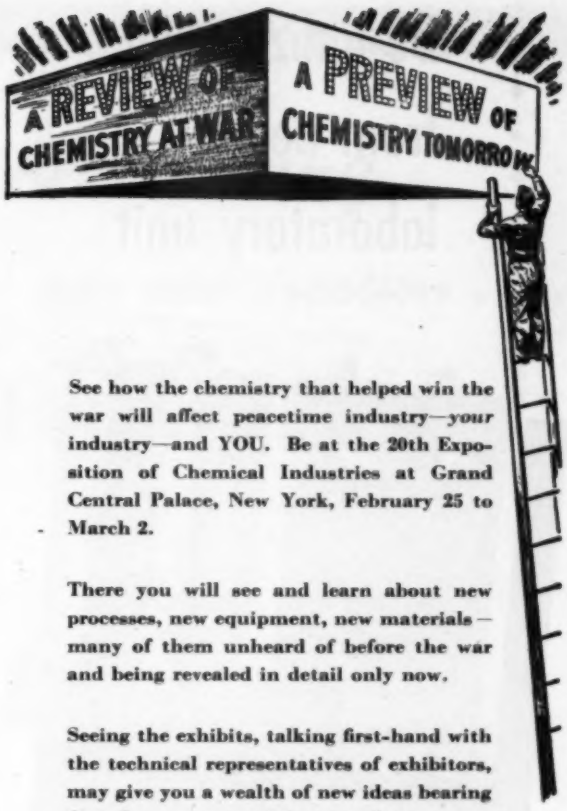

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Clough was very active in various drug industry committees and in sponsoring public relations activities, through Abbott Art projects for the United States Treasury Department, the U. S. Navy and the Surgeon General's office of the U. S. Army.

For relaxation, the affable chief executive plays bridge with several pharmaceutical and medical cronies. He also has a penchant for philately and for publishing which has led him to underwrite at least three books of letters, sketches, verse and aphorisms. Probably the best known Clough literary effort is his "Backbone" collection. His friends say it was really well done. Possibly his most active hobby at the present time is the extension of medical care.

As Abbott Laboratories enters the postwar future, S. DeWitt Clough "stands today, as in the past, a personification of vigor, enthusiasm and enlightened leadership."

Looking Into 1946

(*Continued from page 42*)

late into the second half of the present century.

This places more than ordinary importance upon the recent progress made in the production of cosmetic items for use in the nursery. Supported by intelligent mothers, friends and relatives the average baby enjoys today cosmetic luxuries which were absent from the nurseries of the early decades when soaps were an enemy and cleanliness a bore. This is a healthy development and deserves the wholehearted support of every maker of cosmetics, independently whether he is interested into a "baby line" or not. More will be in the near future. The addition of at least a few items of appeal to the very young and young to any line will prove a good investment. Brand names with which the growing child has become familiar will be remembered in later years.

It will be a similarly good investment, too, to encourage the use of cosmetics among growing boys. Again, it is the mother who, as representative of the family, will carry the deciding voice, whether the cosmetic knowledge of the average school boy will cover just the bare necessities or be widened into a general appreciation of the need of personal good appearance and daintiness as an aid to economic advancement in later years.

Teen-age customs certainly grow from the experiences and habits of younger years. It is not preordained that teen-agers should use lipsticks etc., or learn early to take care of their face, hands and hair. But it is certain that lipsticks, rouges, compacts and vanities could never have reached their present several hundred thousand dollars value without the contributions made by the teen agers,—and it is equally certain that this development can be further accelerated, or slowed up, by the persons in the family who control the family's purse string.

The question, therefore, must be asked whether the future expansion of cosmetic sales will not have to take

in consideration the family as much as the individual. Is it correct to assume that cosmetics are only bought as a matter of personal selection; or is, by any chance, a family market in the making?

Both can very well exist side by side. But, there are essential differences in the sales approach and, even more, in the sales potentialities.

Nineteen hundred and forty-six will offer the first opportunities for a test and the outcome is still anyones guess. However, the manufacturer who sells the family market has several customers from the start as against the one who makes the individual his sole aim.

At any rate, this fact that cosmetics are gaining a foothold in the family market, (must have done so already for a period of years as evidenced by the rising per capita consumption) is something for cosmetic manufacturers to study and to think of. The woman customer who buys for the family wields unusual power and her thinking must be directed into channels favorable to the further expansion of the sale of cosmetics and of individual products.

This will be a matter of advertising and publicity as much as one of intelligent merchandising. Not only does the family buy in larger quantities than the individual; it also requires different dispensing facilities and packaging to meet the requirements of a larger number of consumers acting as one. The family market favors the large economical package. Its expansion will create a new quantity market comparable with that enjoyed by foods and beverages.

The wider acceptance of cosmetics as articles of general consumption must ultimately influence the quantitative ranking of individual groups and makes of cosmetic preparations. Some will gain faster than others. Some manufacturers' products are likely to grow at the expense of others. Billion dollar markets can not maintain themselves without the support of a sufficiently large number of articles of universal appeal, free from the depressing effects of fashion changes. The exclusive formula promoted for its exclusiveness may find its counterpart in post-war cosmetic merchandising in preparations made to fit the tastes of the largest number of potential consumers within one family.

Trench Mouth

(*Continued from page 46*)

agents for this purpose. For topical application these drugs are generally employed in 10 per cent concentration in glycerine, but Albray[11] prefers to use dry arsphenamine on the lesions. Of course, these drugs present definite hazards when improperly used. Bismuth compounds also extensively used as spirocheticides in this disease, are described by Cox and Hodas[3] as having several advantages over arsenicals. In their work, the treatment of Vincent's angina was facilitated by the use of bismuth intramuscularly.

Mouth washes or rinses prescribed for home use in conjunction with other therapeutic measures sometimes provide the combined action of an arsenical and

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an oxidizing agent. One such solution[1] is made from:

Solution of potassium arsenite	**4.0 cc.**
Glycerine	**30.0 cc.**
Wine of ipecac	**4.0 cc.**
Solution of hydrogen peroxide, to make	**90.0 cc.**

This is used as a mouth wash four times a day, previously diluted with a small quantity of warm water. Various modifications of this wash have been suggested from time to time.[14, 16] Of interest in this connection is Bowman's[38] comment on the efficacy of a topical mixture for treating Vincent's disease consisting of equal parts of arsenic solution, wine of ipecac and glycerine.

Antiseptic dyes or dye mixtures also find frequent use in treating trench mouth. The official solution of gentian violet is considered quite effective,[22] while Pfeiffer[15] suggests the use of a one per cent solution of acriviolet. In his comprehensive review on Vincent's disease, Fields[29] reported that a one per cent solution of acriflavine is commonly used in cases that are not too severe or resistant. Frequently mentioned[23, 26, 30] are combinations of crystal, violet and brilliant green; the following being a quite standard preparation for daily application:

Crystal violet	**1.0 Gm.**
Brilliant green	**1.0 Gm.**
Alcohol (50%)	**100.0 cc.**

Another bacteriostatic solution, given by Williams[32], is made from:

Neutral acriflavine	**0.5 Gm.**
Gentian violet	**0.5 Gm.**
Distilled water	**100.0 cc.**

As might well be expected, the sulfa drugs have been tried and have proved quite effective in many cases. Although oral therapy has been employed[17, 21, 32], the indications are that local applications are quite efficient in clearing the condition. In some instances a paste was made with the sulfa compound and this applied to the lesions.[18, 33] More commonly, however, tablets of sulfathiazole are allowed to dissolve in the mouth in order to produce a longer local action.[24, 35] In the procedure employed by Manson and Craig[26], a 0.5 Gm. sulfathiazole tablet is allowed to dissolve on the tongue every two hours during the day and two such tablets dissolved in the same manner every four hours at night. Even though response was rapid, often a matter of twenty-four hours, treatment was generally continued for three days. Lesions "invariably cleared up" in four days after beginning treatment with the sulfathiazole tablets.

Pointing up the value of such sulfathiazole tablets for home treatment as a supplement to office treatment, Lambke[25] stresses the importance of using highly compressed tablets which, instead of disintegrating rapidly, last at least half an hour in the mouth.

As penicillin became more available this potent antibiotic began to be tried for treating trench mouth. Intramuscular injections of penicillin have yielded

prompt response, generally within a period of twenty-four to forty-eight hours.[37, 38, 39] However, it appears that the pain of injections, to say nothing of the technic and care required, may be obviated by the topical application of the drug.

A number of methods have been proposed to secure an effective, local concentration of penicillin in the mouth. Some investigators[40, 41, 42] obtained very good results by swabbing or spraying the lesions several times daily with various concentrations of penicillin. In England, Thaxton and Dick[43] obtained excellent results in the treatment of Vincent's infection by packing infected areas with a paste of penicillin powder mixed with magnesium oxide and olive oil and incorporating small wisps of cotton-wool.

Although all of these methods have yielded good results, the indications are that, from the standpoint of convenience and economy, penicillin can work its effects best when incorporated in a slowly dissolving lozenge or pastille held in the mouth. In the latter part of 1944, MacGregor and Long[44] reported that Vincent's disease could be treated more simply and more quickly with the use of penicillin pastilles than by any other method, provided the drug was used in a slow-melting medium that will not cause excessive salivation, be approximately neutral in reaction and not contain any penicillin inhibitor. Gelatin was found to be the most suitable base for making the required base or medium.

Since then quite a number of gelatin bases and methods for making penicillin pastilles have appeared in the literature.[45, 48] One of these, described by Rosenthal[49], has the added advantage of providing palatability through the use of sugar and a flavoring oil. The formula and procedure is as follows:

Sodium citrate	**2.0 Gm.**
Starch	**20.0 Gm.**
Gelatin	**40.0 Gm.**
Sucrose	**60.0 Gm.**
Distilled water	**140.0 cc.**
Oil of peppermint	**6.0 minims**
Penicillin calcium	**100,000 units**

The solids and distilled water are boiled together for three minutes with constant stirring. The mixture is then cooled to about 80° F., and the penicillin added with constant stirring. The mixture is then poured into a small waxed container, 8 by 16 by 2 cm., covered and stored in the refrigerator. The jell may be divided into 40 cubes or lozenges.

However, the base for making penicillin lozenges need not be complex. For example, a suitable base can be prepared from a simple combination of:[50]

Gelatin	**100.0 Gm.**
Glycerine	**150.0 cc.**
Water	**150.0 cc.**

In the meantime, Greey and Macdonald[51] discovered that longer-lasting lozenges, offering even greater economies in penicillin, could be prepared by using agar as a base. With a base of this type, the pastilles dis-

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integrate very slowly, especially if care is taken not to chew or otherwise hasten solution. Pastilles of this type, suitable for treating Vincent's angina, are made by adding 8 Gm. of agar to 200 cc. of distilled water. Autoclave for 30 minutes and while still hot filter through non-absorbent cotton. Collect the filtered agar is a flask and place in a water bath at 50 to 55° C. When cooled to about 50° C., add the desired quantity of penicillin solution. Mix thoroughly. By using suitable bore glass tubing to facilitate shaping and cutting, there may be formed pastilles weighing about 0.6 Gm. each, with a diameter of 13 mm. and a thickness of 5 mm.

Probably more pleasing to the palate is the base developed by Nussle,[48] containing agar, simple syrup and glycerite of starch.

Of pertinent interest is the fact that penicillin troches or lozenges have recently been listed in the *Journal of the American Medical Association*[53] in the new dosage forms of penicillin. Such products are classed as suitable for use in Vincent's infection when allowed to dissolve in the mouth.

BIBLIOGRAPHY

1. Burlage, H. M.: Am. Prof. Pharm. 7:634, 1941.
2. Rosenthal, S. L.: Dent. Survey 21:1589, 1945.
3. Cox, H. M. & Hodos, J. H.: New York State J. Med. 45:741, 1945.
4. Dental Div., Surg. Gen. Office: (through) Dent. Survey 21:643, 1945.
5. McCarthy, F. P.: J.A.M.A. 116:16, 1941.
6. Hirschfeld, I.: J.A.D.A. 29:1150, 1942.
7. Craster, C. V.: J. Med. Soc. New Jersey 41:230, 1944.
8. Dean, H. T., et al.: J.A.D.A. 32:756, 1945.
9. Schluger, S.: J.A.D.A. 30:524, 1943.
10. Malter, H. L.: Military Surg. 94:358, 1944.
11. Albray, R. A.: Dent. Survey 20:1548, 1944.
12. Jacobs, M. H.: J.A.D.A. 30:392, 1943.
13. Pelner, L.: Am. J. Digest. Dis. 11:63, March 1944.
14. Francis, F. D.: J.A.D.A. 28:1296, 1941.
15. Pfeiffer, R. H.: Den. Survey 21:1030, 1945.
16. Mielke, A. J.: Dent. Survey 19:1031, 1943.
17. Jones, C. P.: Laryngoscope 55:147, 1945.
18. King, J. D.: Lancet 2:32, 1940.
19. Correa, A. & Oriente, L.: (through) J.A.M.A. 119:981, 1942.
20. Johnson, W. M.: N. Carolina Med. J. 4:51, 1943; J.A.M.A. 129:91, 1945.
21. Ungley, C. C. & Horton, J. S. F.: Lancet 1:379, 1943.
22. Schicks, G. C.: J.A.Ph.A., Pract. Pharm. Ed. 1:260, 1940.
23. Williams, R. G.: Australian J. Dent. (through) Oral Health, Oct. 1940, p. 751.
24. Johnson, R. E.: Bull. Univ. Minnesota 47:86, July 24, 1940.
25. Mallett, S. P.: J.A.D.A. 29:384, 1942.
26. Stammers: Brit. Dent. J. 76:171, 1944.
27. Anon.: Brit. Dent. J. 72:192, 1942.
28. Bowman, F. B.: Canadian M.A.J. 43:471, 1940.
29. Field, H., Jr.: J.A.M.A. 114:1073, 1940.
30. Dean & Singleton: Am. J. Publ. Health 35:433, 1945.
31. Hirsch, F. G. & Spingarn, C. L. Military Surg. 93:299, 1943.
32. Fellows, A. T.: U. S. Naval Med. Bull. 41:1733, 1943.
33. Greenhut, W. M.: New York J. Dent. 12:251, 1942; J.A.M.A. 123:721, 1943.
34. Linton, C. S.: J.A.M.A. 123:341, 1943.
35. Lambke, A. F.: Dent. Survey 20:817, 1944.
36. Manson, W. W. & Craig, I. T.: J.A.M.A. 127:277, 1945.
37. Marks, M. B.: J. Pediatrics 26:582, 1945.
38. Pearce, W. F. & McDonald, J. B.: J.A.M.A. 128:342, 1945.
39. Schwartz, B. M.: J.A.M.A. 128:704, 1945.
40. Cofield, K. R., Ferguson, E. W. & Toye, A. E.: J.A.D.A. 32:529, 1945.
41. Callaway, J. L.: South. Med. & Surg. 107:178, May, 1945.
42. Shallenberger, P. L., Denny, E. R. & Pyle, H. D.: J.A.M.A. 128:706, 1945.
43. Thaxton, R. & Dick, P. K.: Brit. Dent. J. 78:292, 1945.
44. MacGregor, A. B. & Long, D. A.: Brit. Med. J. 2:686, 1944.
45. Martin, L. L.: Pharm. J., Dec. 2, 1944.
46. Dahl, R. J.: J.A.Ph.A., Pract. Pharm. Ed. 6:120, 1945.
47. Tice, L. F.: Am. Prof. Pharm. 11:524, 1945.
48. Nussle, J. A.: Am. J. Pharm. 117:272, 1945.
49. Rosenthal: U. S. Naval Med. Bull. 45:75, 1945.
50. Jeram, R. J.: Chem. & Drug. 144:254, 1945.
51. Greey, P. & Macdonald, I. B.: Canadian M.A.J. 52:327, 1945.
52. Keefer, C. S. et al.: J.A.M.A. 128:1161, 1945.

Private Brands

(*Continued from page 47*)

either sensing a private label or at least aware of special emphasis on the part of the store, will in time make its own comparison, between the line the store assures them is best and what others have to offer.

There are fairly well defined limits in the precentage of total business which can be done under the most

favorable conditions for private label. These limits rarely exceed five percent cut. They vary with the skill in merchandising of the retailer, the time he will devote to his own line, the ability of the store to compete in prestige and public confidence with any or all manufacturers, and the volume of traffic controlled by the store. Any attempt to push the business of private label much beyond its normal limits can have a bad effect on store profits. Traffic is largely predicated on a variety of selection, a variety of promotions, many new introductions and a succession of bargains. Any effort abnormally to enlarge the space occupied by private label, to draw selling away from a wide variety of selection will in the long run adversely effect traffic.

CANTHARIDES IN HAIR PREPARATIONS: Will you kindly let us know at your earliest convenience whether there are any regulations preventing the use of tincture of cantharides in a hair product or hair pomade? Philadelphia.

If these products are intended solely for therapeutic use there would probably be no objection to their employment, but inasmuch as cantharides is a highly irritating drug, I do not believe that it has any place in a cosmetic or general purpose hair preparation. Of course, I am not an authority on the subject, hence I would suggest that you submit your question to the Food and Drug Administration, Federal Security Agency, Washington, D. C.

DENTURE CLEANERS: Thank you for your resent letter in which you gave us a standard denture plate adhesive formula. We are working on it now. We are also interested in a companion product for cleansing a denture and have in mind one that can be made in powder form and water added wherein the denture can be placed in this bath overnight. We believe the basis of this is one of the sodium phosphate group. Any formulae you can give us will be greatly appreciated. Chicago.

A product of this type which appears in the "Accepted Dental Remedies" is made as follows:

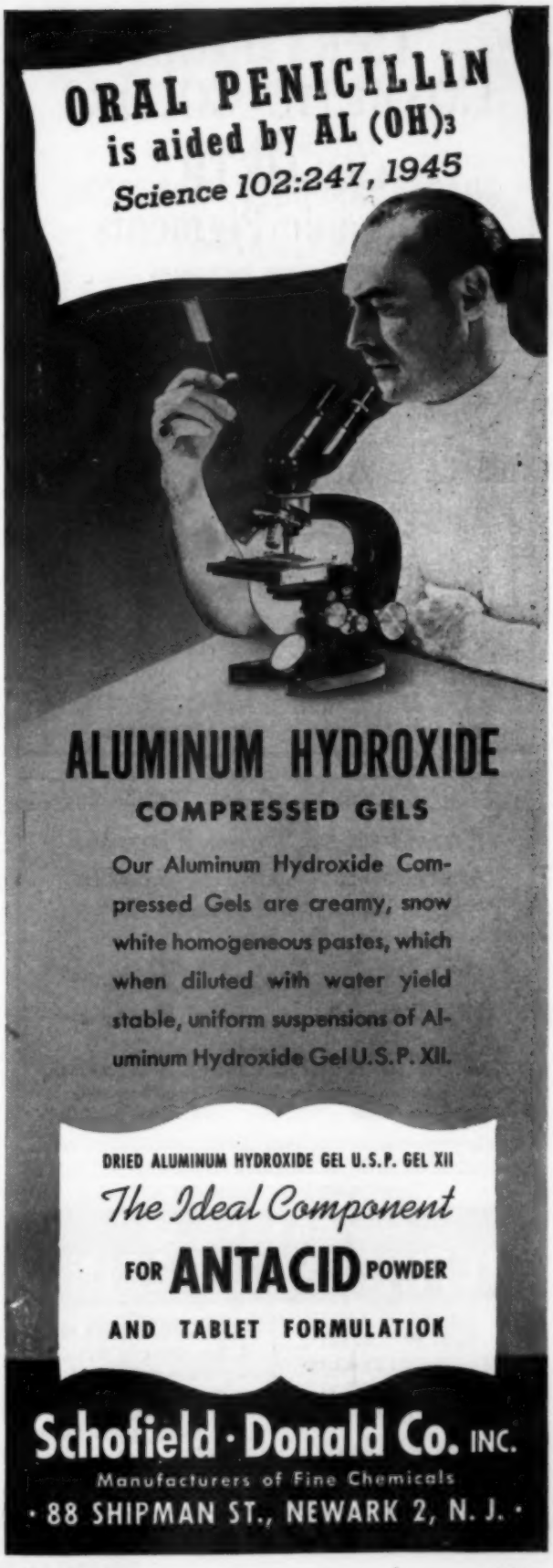
Trisodium phosphate	**120.00 Gm.**
Oil of cinnamon	**0.3 cc.**
Liquor Amaranth	**2.0 cc.**

Dissolve a scant ¼ teaspoonful in half glass of water and use with brush. Note: Cellulose acetate type dentures are decomposed by alkaline substances. Formaldehyde and phenol formaldehyde types withstand most chemical agents.

A more rounded product suggested a few years ago in a British publication consists of:

Sodium perborate	**240 grains**
Sodium chloride	**480 grains**
Exsiccated magnesium sulfate	**30 grains**
Calcium chloride	**30 grains**
Anh. sodium carbonate	**30 grains**
Methyl salicylate	**1 min.**
Menthol	**2 grains**
Oil of peppermint	**12 mins.**

Add a little kaolin or magnesia to the powder to prevent it from caking. To use, dissolve a small portion in water, and allow the dental plate to remain in the solution overnight.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Patents and Pharmaceuticals

(Continued from page 51)

them is, I believe, defensible. If we have people who are too poor to purchase adequate food, clothing or shelter or drugs, that is another problem and not necessarily a reflection on the patent system. But too often we find individuals on the one hand perfectly content to pay $6 for a bottle of whiskey, $2 for dinner and $15 for an evening's entertainment and yet on the other writing to their Congressmen because they have to pay $2 or $3 a day for something that saved them the expense of a beautiful funeral. Critics of the pharmaceutical industry don't always distinguish clearly between the manufacturer's selling price and what the consumer pays. According to several reports $5 or more a vial is fairly commonly charged for penicillin which the industry is selling for from 45 to 75c a vial. It has been the experience of this industry that the margin of profit on drugs generally available and not heavily advertised is too small to support a program of research that will lead to a continuous flow of new drugs. Penicillin, which is not patented, is a good example of what happens to non-exclusive drugs. Penicillin costs a number of manufacturers 55c a vial and they are selling it for 45c. One can't support a research program on economics of this character. The exclusive specialties pay the way for research and the surest way to wither progress in the industry is to adopt measures which will make it impossible for a concern to enjoy that period of exclusiveness which the Constitution and the patent laws intended it to have.

If drug concerns are to be denied the full protection of our patent laws, it will have one inevitable result. In order to create a substantial market for his product which is the same as that marketed by everybody else, manufacturer A will launch a large and expensive advertising program for his trade-marked article. It is the only method he has left to create the volume of business necessary to bring a return adequate to support research and have a fair profit. Others will match the effort and we will inevitably become an industry in which advertising expenditures become high. The small manufacturer, not being able to stand the gaff of heavy advertising, will go under, and like the cigarette and soap manufacturers who have no unique or original products, we will sooner or later emerge as an industry with only a few powerful manufacturers and no little fellows. Certainly this is not in the public interest. It is a fate which we must not let our shortsighted Washington reformers visit upon us or upon the public.

For many years Great Britain has had compulsory licensing provisions as part of its patent policy. There is no evidence that this has had any beneficial effect upon the public health and welfare of the British.

In fact, less than 1% of all British patents have been subject to such licenses and the consensus is that the provision is a flat failure. Fair-minded Englishmen who have been in this country are quick to admit that we have been far ahead of them in the development of drug therapy and manufacturing techniques. It is not without significance that we were called upon to supply Great Britain and the British Army as well as all the rest of our Allies with the drugs they needed. It was not only a question of raw materials, bombings, and supplies. Through the stimulus of our system of free enterprise we had a flourishing, efficient, well managed drug industry with many hundreds of factories that could be turned to the task of supplying drugs for the entire world on short notice.

Proponents of compulsory licensing of patents have pointed to the automobile industry which has a patent pooling arrangement, as an example of the success which attends such a system. Let me remind the listener that the manufacture of cars is concentrated in four or five major companies. With all the patents available no small concern could hold its head above water and compete with the Goliaths of the auto industry. Those already in the industry make vast expenditures for good will and meaningless name advertising, rather than depending upon unique features to sell their cars. In other words it would be virtually impossible for a small concern with limited capital to compete with the established giants in the industry, even if the small fellow had an invention that produced a superior car.

If the small drug manufacturer with an original product is required to share his invention by compulsory licensing with all the big fellows in the industry, the big fellows with their heavy advertising expenditures and large detail staffs will steal the play from the little fellow and he will get nowhere. If compulsory licensing is brought into the pharmaceutical manufacturing industry, I venture to say that the large concerns will grow larger and stronger and the small ones will languish. Eventually we will have a situation that is exactly what we have in the automotive industry. Through the protection of our patent system as it is today, the small inventor, and the small concern has the best opportunity of developing and prospering.

With our recognition of the importance of research, the American Pharmaceutical Manufacturing Industry faces its most brilliant era. Let us not compromise the future by permitting the adoption now of measures which have been carefully examined and rejected in the past. Our patent system and the American way of life are inextricably interwoven. Let's keep both.

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